

BIO-DATA OF Dr. S. L. DHINGRA

1. PERSONAL DETAILS

- i) Name **Dr. SUNDER LALL DHINGRA**
- ii) Nationality Indian
- iii) Date of Birth 11th October, 1942
- iv) Father's Name Late Shri Sobha Ram Dhingra
- v) Permanent **Street Dr. Waryam Singh**
Address New Qrs. B 44
Nabha (Punjab) - 147 201 (INDIA)
- vi) Present **Professor of Transportation Systems Engg.**
Address Dept. of Civil Engineering,
Indian Institute of Technology
Bombay - 400 076, (INDIA)
- vii) Marital Status Married, having two children

2. EDUCATIONAL QUALIFICATIONS

University	College	Exam. Passed	Year	Divn.	Rank
Punjab Univ. Chandigarh.	Arya High School, Nabha	Matriculation	1960	1 st	1 st
Punjab Univ. Chandigarh.	Govt. Ripudaman College, Nabha	Pre University	1961	1 st	2 nd
Punjab Univ. Chandigarh.	Govt. Ripudaman College, Nabha	Pre Engineering	1962	1 st	4 th
Punjab Univ. Chandigarh.	Punjab Engg. College, Chandigarh	B. Sc. Engg. (Civil)	1966	1 st	-
Punjab Univ. Chandigarh.	Punjab Engg. College, Chandigarh	M. Sc. Engg. (Highway)	1968	1 st	2 nd
Indian Institute of Technology, Kanpur	Indian Institute of Technology, Kanpur	Ph. D (Transportation Systems Engg.)	1981	CPI = 9.0	-

Ph.D. Thesis Topic :

Simulation of Routing and Scheduling of Urban Bus Transit Network.

M.Sc. Engg. Thesis Topic :

Construction of Bituminous Pavements Using Wet Aggregates.

3. EXPERIENCE

Sl.No	Designation	From	To	Name of Organisation
1.	Professor (Retd.) & Emeritus Fellow	01.11.2007	Continuing	I. I. T. Bombay
2.	Professor	06.11.1990	01.11.2007	I. I. T. Bombay
3.	Asst. Professor	29.05.1985	05.11.1990	I. I. T. Bombay
4.	Lecturer	06.02.1980	28.05.1985	I. I. T. Delhi
5.	Lecturer	06.08.1969	05.02.1980	M. Regional Engg. College. Jaipur
6.	Assoc. Lecturer	18.07.1968	05.08.1969	M. Regional Engg. College. Jaipur
7.	Lecturer	07.03.1968	10.07.1968	Punjab Engg. College. Chandigarh
8.	Hon. Lecturer	01.11.1966	31.10.1967	Punjab Engg. College. Chandigarh

Details of Experience**3.1. Subjects Taught : (UG and PG)**

Urban and Regional Transportation System Planning, Roads, Railway and Airport Engineering, Transportation Systems Engineering, Transportation Engineering Laboratory, Traffic Engineering, Evaluation and Analysis of Transportation Projects, and Water Transportation, Building Materials, Advanced Construction, Building Design and Drawing, Practical Geometry, etc.

3.2. At IIT Bombay, among Teaching, Research, Research Guidance, Planning, Administration and Development :

- a.) **Patron IIT Bombay Golden Jubilee International** Conference and 8th International Workshop on Transportation Planning and Implementation Methodologies For Developing Countries TPMDC 2008.
- b.) Co-ordinator, Programme for Planning and Management of in Transportation Engineering systems. Ministry of HRD.
- c.) **Head, Civil Engineering Dept 1996-2000.**
- d.) Curriculum Development for M. Tech Programme in Transportation Systems Engineering .
- e.) Co-ordinator, for Internationally successful M.Tech. Programme in Transportation Systems Engineering since its inception.
- f.) Organizing Secretary, International Workshop TPMDC (since 1994), **International Conference CUPUM 1997** and NCOTSS-1988.
- g.) Secretary, DPGC, 1987-90 & Member DPGC from 1985-1996, and convenor 1996 onwards.
- h.) Member, Institute Maintenance Advisory Committee from June, 1990-99
- i.) Member, Departmental Stores/Purchase Committee, since 1987.
- j.) Member, Inter-disciplinary Programmes Committee for I.E. & O.R. 1990-1995.
- k.) Convenor, Institute Furniture & Fixtures Committee April, 1995-May 2000.
- l.) Convener, **Institute Traffic & Transportation Planning & Monitoring Committee**, Since 2000.
- m.) Member, **Institute Master Plan Committee, Since May 1999-2004**

n.) IIT Bombay Campus Transportation Network Improvement Studies:

- Institute Parking Study for Master Plan Committee.
- Economic Feasibility of In campus Transport Study for Master Plan Committee.
- Planning and Designing of QIP-SAMEER Hillside Road, IIT Bombay.
- Interim Report on Campus Road Network Improvement.
- Study for the Improvement of Adi Shankaracharya Marg (Gandhi Nagar - L&T Road).
- Study for Improvement of Campus Intersections.
- Study for Priorities for Widening and Improvement of Campus Roads.

3.3.Major Fields of Interest :

Transportation Systems Engineering, Digital Simulation, Highway and Traffic Engineering, Railways and Airport Engineering, Economic Evaluation of Transportation Projects, Land use-Transport Modelling, Expert Systems, AI, Micro simulation, GIS & Fuzzy Set Theory in Transportation Modelling. Advance computational technique in transportation systems engineering.

3.4.Membership Of Technical Bodies

- a) Member, American Society of Civil Engineers (ASCE).
- b) Member of Task Force on Urban Transport for 10th Five Year Plan (2002-2007),
- c) Constituted by Ministry of Urban Development & Poverty Alleviation
- d) Member of Research Council of CRRI, New Delhi.
- e) Life Member, Indian Roads Congress, LM 4560.
- f) Life Fellow, Institution of Engineers (India), 14507/2.
- g) Life Member, Indian Society for Technical Education LM 2979.
- h) Life Member & Member of Governing of Governing Council of The Institute of Urban Transport
- i) Life/Founder Member and Joint Secretary, Executive Committee of Association of Transport Development of India (ATDI).
- j) Member (Chartered), World Conference on Transportation Res. Soc., USA.
- g) Life Member, Institute of Rail Transport.
- h) Member Urban Railways
- i) Member of Research Council of NATPAC, Department of Science Technology and Environment, Government of Kerala, Trivandrum
- j) Member of the Board for Science and Technology, IGNOU, New Delhi.

- k) Member Institute of Transport Management
- l) Editorial Advisory Board of Journal of NICMAR

4 SESSIONS CHAIRED HONOURS, AWARDS, ETC.

- a.) Invited by Traffic Flow Theory and Characteristics Committee(AHB45) of **TRB of the National Academies** for Technical presentation on TRB Symposium on The Fundamental Diagram: 75 Years, July 08-10,2008
- b.) **Chief Guest & Key-Note address on “Key issues, challenges and opportunities in planning & implementation of infrastructure projects”** in National Conference On Emerging Technologies In Civil Engineering (**NCETCE-2008**) February 28-29, 2008, organized by department of civil engineering, PDVVP, Government College of Engineering Ahmednagar.
- c.) Invited Speaker for Plenary Session –II on “Integrated Urban Multimodal Mass Transit System for Sustainable Development”at **Indo-US Workshop on Advances in Mass Transit And Travel Behaviour Research (MTTBR-2008) at IIT Guwahati on 12-15 February, 2008: Managing Rising Travel Demand and Congestion in Urban Transportation Networks**
- d.) **Key-Note address “Advances, key issues, challenges and opportunities in transportation planning & infrastructure projects”** in National conference on Emerging Technology And Developments In Civil Engineering (**ETDCE07**) mar 22-23, 2007, organized by department of civil engineering, Government College of Engineering Amravati
- e.) **Guest Of Honour And Key-Note Speaker:** At inaugural session of **Policy Measures for Urban Transportation Planning for Sustainable Development** at National Conference on Sustainable Transportation: Issues and Management Strategies "SUTRIMS-07" Dec 28-29, 2007 SVNIT, SURAT
- f.) Recipient of the **VISVESVARAIYA AWARD in the category "Eminent Professor”** for the year 2006 in the **India Infratech 2007**, a regular international seminar organized by Construction and Business Records, held on 21 April 2007.

- g.) One of the nine panellists for panel discussion on "Utility & Practical Relevance of Transport Research", at 9th WCTR, July22-27,Seoul,South Korea.
- h.) Chaired & organised, Technical sessions at 5th, 6th, 7th, 8th and 9th **World Conference on Transport Research (WCTR) at Yokohoma Japan, Lyons France, Sydney Australia, Antwerp Belgium, Seoul South Korea, respectively.**
- i.) Awarded **Fellowship of United Nations Centre for Regional Development (UNCRD)** to participate 5th WCTR, Yokohama, Japan.
- j.) Award for **Excellence in Teaching**, for the year 2002, given by IIT Bombay.
- k.) **Invited Chief Guest** and Delivered Plenary Lecture at National Seminar on Sustainable Transportation Systems Planning Nirma Institute of Technology, Ahmedabad.
- l.) Seminar talk presentations & discussions during April/May 2002 at UNLV, UOTA, UCF, USF, GMU (Fairfax & Arlington Campus), Univ. of Maryland at College Park, Rutgers University, NJ.
- m.) **Key Note Paper on “Planning, Financing and Institutional Aspects of National Highways, State Highways and Major District Roads”** at Seminar on Integrated Development of Rural and Arterial Road Network for Socio-Economic Growth. New Delhi December 2003.
- n.) **Invited Paper on “Relevance and Methods of Economic Analysis for Rural Roads”** at Seminar on Integrated Development of Rural and Arterial Road Network for Socio-Economic Growth. New Delhi November 2003.
- o.) Session Chaired at 2nd International Gulf Conference on Road, Abu Dhabi, 14-19 March 04.
- p.) **Key Note Paper** at Two Days Seminar on Urban Transportation and Environment, MSU Baroda, 13-14 March 2004.
- q.) **Sessions Chaired** at International Conference on Transportation Systems Planning and Operation, IIT Chennai, 18-21 Feb. 2004

- r.) **Key Note Speaker** at National Seminar on Strategies in Traffic Engineering and Management, M. S. Ramaiah Institute of Technology, Bangalore, 16-17 Feb. 2004.
- s.) **Invited paper** on “**Integrated Urban Mass Transit System for Sustainable Development**” Environmental Friendly Transportation Seminar “PRITHVI 2005 Global Eco Meet ” , Trivandram, Kerala, February 24-25, 2005
- t.) Key note paper “**Master Planning for Mumbai Metro Towards Integrated Multimodal Sustainable Mass Transit System** ”, START 2005, International Conference, IIT Kharagpur , INDIA.
- u.) **Key-Note paper “Policy Measures for Sustainable Transportation Planning & Development”** at Short term course on “Critical Issues & Challenges to Civil Engineers in 21st Century “ Nov 29-Dec 04, 2004 L. D. College of Engineering, Ahmedabad (Gujrat)
- v.) Delivered **Key-note Addresses/invited speeches Chief Guest/Guest of Honour** in the conferences/workshops at many Institutions like:

University of Calgary, Canada.
 University of Aachen, Germany.
 James Cook University, Australia.
 University of Texas, Austin.
 Nagoya University, Japan.
 Rutgers University, NJ, USA
 George Mason University, Washington DC
 University of Maryland
 University of South Florida
 University of Nevada Las Vegas
 Workshop by ITE USA Saskachewn, Canada
 Nirma Institute of Technology, Ahemedabad
 M.P Tecnlogical University, Bhopal,
 J. N. T.U Hyderabad
 Thapar College of Engineering and Technology, Patiala, Punjab
 NIT Calicut, NITK Surathkal
 S P NIT Surat, MS University Baroda.
 NATPAC Trivandrum
 NIT, Cochin,
 K.L.E. Society’s College of Engineering Belgaum,

M. S. Ramaiah Institute of Technology Bangalore.
IIT Madras
IIT Guwahati
Institution of Civil Engineers and Architects, Ahmedabad
Institution of Engineers (Andaman Centre), Port Blair

6. RECENT SPONSORED/CONSULTANCY RESEARCH PROJECTS

1. Mumbai Trans-Harbour Link Metro Line Study, **Reliance Industries Limited**, Navi Mumbai
2. Passenger Water Transport , NMSEZ, **Reliance Industries Limited**
3. Metro-II, NMSEZ, **Reliance Industries Limited**, Navi Mumbai
4. Maharashtra I Techno-economical Feasibility of Rregional Airports Study, **Reliance Industries Limited**, Navi Mumbai
5. Rural Roads Pavement Performance Study(RRPPS) ,**NRRDA, Min of Rural Development**
6. Model Development for Economic Evaluation & Analysis of National Highway Scheme Supported by the World Bank, **Ministry of Shipping & Transport**
7. Appraisal of certain Highway Projects in India, **Ministry of Shipping & Transport**
8. Economic Feasibility Higher Axle Loads for Indian Roads, **Ministry of Shipping & Transport**
9. Bituminous Mix Design for Jet Bag 16, Palam Airport, May, 1982, **International Airport Authority**
10. Investigation of Pavements for Heavy Truck Movements Carrying Steel., **SAIL/NBCC New Bombay**
11. Quality Control of Pavement for Heavy Truck Movements Carrying steel, **SAIL/NBCC New Bombay**
12. Proof Consultant CIDCO Railway Project, **CIDCO/IRCO**
13. Traffic Circulation Plan for New Domestic Air Terminal, **IAAI, Bombay**
14. Evaluation of PCN for Main Runway of Bombay Airport. **IAAI, Bombay**
15. Evaluation of Subsurface conditions for the construction of pavement floorings, parking areas etc. and pavement design at Taloja, New Bombay., **NBCC New Bombay**
16. Strategic Land use Transport evaluation for Madras Metropolitan Area for the World Bank funded MMRDA 's `Comprehensive Transport Study for Madras'., **RITES, Madras/Delhi.**
17. Evaluation of Alignment for Mass Rapid Transit System for Delhi. **RITES, Delhi.**

18. Jammu Region Passenger & Goods Movements Planning for JRTs., **MITES, Delhi.**
19. Future Requirements for N.H. Network around Ahmedabad-Gandhinagar., **Shledia Associates**
20. Improvement of Traffic circulation around Ghatkopar Rly.Station, **BMRDA, Bombay.** BMRDA Bombay, **BMRDA, Bombay.**
21. Development of a Manual for Traffic & Transportation Studies. **MITES, New Delhi.**
22. Review of Land Use-Transport modelling for Indian cities., **MITES, New Delhi**
23. Environmental Impact Assessment of Transportation Improvement Projects in BMR under BUTP-II. **BMRDA/AIC WATSON.**
24. GIS Technology for National Highway Network, **AICTE Sponsored.**
25. Development of GIS Data base for Regional Road Network in Bombay Region., **DST Sponsored.**
26. Socio-Environmental Feasibility of 3.2 Km Haji Ali- Wilson College Urban Viaduct.
27. 22. Traffic & Transportation Study for Bandra-Worli Sea Link Project, MSRDC, and Mumbai.
28. Mass Rapid Transit System-Thane, CES India Limited.
29. Traffic Management Scheme for Marol Industrial Area, Mumbai.
30. Evaluation of Pedestrian Subways on Eastern & Western Express Highways, Gherzi Eastern Limited, Mumbai.

7. SOFTWARE DEVELOPMENT

- a) Computer based **Highway Economic Investment and Analysis Model (HEIAM)** has been developed and successfully used for certain highway projects of Ministry of Shipping and Transport ensuring MOST a World Bank Loan of about Rs. 400 crores. In a circular No. RH/NH III/COORD/86/84 dated 17th September, 1984 issued by Govt. of India, Ministry of Shipping and Transport (Roads wing) all State PWD Chief Engineers dealing with NH's, they have been made aware of this model developed at IIT, Delhi and suggested to make use of the model for projecting highway and bridge projects for the purpose of economic evaluation.
- b) Model Development for Depot Augmentation Problem has been completed. Depot Augmentation Program (DAP) software has been developed for 'Determination of Optimal Augmentation Plan for Depots to Starting Points of Routes to minimize the total expenditure over planning horizon'. The software has been utilised for D.T.C. network.
- c) Routing and Scheduling of Urban Bus Transit Network.

- d) Economic Evaluation of Higher Legal Axle Loads for Indian Roads.
- e) Bus Travel Demand Forecasting for a Developing City.
- f) Economic/Toll Viability for Expressways in India.

8. MEMBER OF EXPERT COMMITTEES/ EXPERT INVITEE / Ph.D., M.TECH. EXAMINER

- 1) Member of the **Highway Specifications & Standards Committee of Indian Road Congress.**
- 2) Member and on the **Governing Council of Institute of Urban Transport(India) & Chairman of IUT(I) Bombay Chapter.**
- 3) Member of **International Scientific committee of World Conference on Transport Research Society(WCTRS)** & it's Chartered member
- 4) Member of Indian Road and Transport Development Association
- 5) On the **Editorial Advisory Board of Journal of Advance Transportation, USA.**
- 6) **Member of the Advisory Committee for Master Planning of Navi Mumbai SEZ, RIL ,**
- 7) **On the Advisory Board of Mahindra World City, SEZ, Jaipur for Mater Planning and implementation of Intelligent Transportation Network.**
- 8) Member, nominated by **Government of India, Ministry of Road Transport and Highways** to the ST-3 Committee on **Risk Management for Roads** of PIARC (**World Road Congress**) for 2004-2007.
- 9) Panel Reviewer for the Journal Transport Management, CIRT Pune.
- 10) Join Editorial Advisory Board of the NICMAR Journal.
- 11) Nominated member of **High Court-3 member Expert Committee** for Andheri flyover shopping complex.
- 12) Member of Advisor committees,
- 13) Maharashtra Airport Development Company Ltd. for the development of Multi-Modal International Hub Airport at Nagpur (MIHAN)
- 14) **One-Man Committee** for Socio-Environmental Investigation of 3.2 Km Haji Ali Wison College Urban Viaduct .
- 15) **Chairman** of Technical Advisory Committee (TAC) for Nagpur Road Widening & Beautification Project of MSRDC.
- 16) **Member of TAC** for Maharashtra State Road Development Corporation for the following projects
- 17) Worli Bandra Sea Link Landmark Structure
- 18) Western Freeway Sea Link
- 19) MRTS Thane
- 20) Trans-Harbour Link

- 21) Vasai-Nariman Point Water Transport Project.
- 22) Nagpur International Hub Airport.
- 23) High Court Expert Committee for Andheri Flyover Shopping Complex
- 24) Passenger Water Transport, Mumbai West Coast.
- 25) Appointed Member of the Core Group of Highway Research Board of IRC, 1997-2000
- 26) Member of Highway Research Board of Indian Roads Congress 1997-2000
- 27) Expert Invitee to talk on "Environmental Impact Assessment of Bombay Urban Transport Projects" at National Workshop on "Environmental Pollution and Control" April 12-13, 1997 Engg College, Belgaum.
- 28) Nominated Member of International Scientific Committee of World Conference on Transport Research Society 1992 onwards
- 29) [Nominated Member of Indian Roads Congress, Highway Research Board, Expert Group to prepare the State-of-Art report on Granular and bound bases and sub-bases.](#)
- 30) Member of the Steering Committee and Organising Committees of the International Conference of Transp. System Studies (ICOTSS) 1986, IIT Delhi.
- 31) Expert Invitee to 'Improving Bus Passengers, Safety in the Indian Context' at the 2nd International Symposium on Transportation Safety organized by the Institute for Safety in Transportation, Inc., New York at Athens, Greece, 17-21, June, 1985.
- 32) Expert Invitee to the National Seminar cum Workshop on 'Inter Modal Transport Co-ordination System for 2001 A.D. with special reference to Developing Countries sponsored by the Ministry of shipping and Transport, Govt. of India, University Grants Commission (UGC), Indian Council of Social Science Research (ICSSR), April 14-15, 1985, organized by L.N. Mishra Institute of Economic Development and Social Change.
- 33) Expert Invitee to the Seminar, 'Unified Metropolitan Transport Authorities for Metropolitan Cities', sponsored by Ministry of works and Housing, Govt. of India and organised by TCPO and School of Planning and Architecture, New Delhi, Feb. 25-27, 1984.
- 34) Member of the Steering and Organizing Committees of the Seminar on 'Future Land use Transport Structure of Delhi', held at IIT Delhi, Dec. 12, 1983.
- 35) Expert Invitee to the Seminar on 'Transportation Costs and **Planning**' at Central Road Research Institute, New Delhi, May 11-13, 1983.

- 36) Expert Invitee to the Workshop on 'Transportation Research Identification of Priority Areas', sponsored by Ministry of Works and Housing, Organized by School of Planning and Architecture, New Delhi, 25-26, March, 1982.
- 37) Expert Invitee to the DDA sponsored Seminar on 'Policies for Delhi 2001 Transportation', held at Vigyan Bhavan, New Delhi, April 26, 1982.
- 38) Member of the Steering and Organising Committees of the National Seminar on 'Transportation System Studies, Analysis and Policies', held at IIT Delhi, March 26-27, 1981.
- 39) Nominated Member of Ministry of Shipping and Transport Committee for the Planning of Road Transport Network for the country for 2001 A.D.
- 40) Presented a Key Paper on 'Intra Urban Co-ordinated Mass Transit System' in the first technical session on 'Performance Appraisal of Various Modes of Transport'. at National Seminar on 'Transportation System Studies, Analysis and Policies', held at IIT Delhi, March 26-27, 1981.
- 41) Examiner for Ph.D./ M.Tech./ M.S theses at IIT Kanpur and IIT Madras, IIT-Delhi, REC Surat, R. E. C., Warangal, Bangalore University, Indore University.
- 42) Nominated as Chairman of the Committee of Planning Board of NIT Surat, to select Architect/Consulting Civil Engineer for various Civil Engineering Projects Sanctioned by MHRD and TEQIP aided World Bank.

9. PROJECTS GUIDED/GUIDING

A.) Ph.D. PROJECTS:

1. Multimodal Urban Mass Transit Network Planning by Dr. Swapan K. Deb, 1987.
2. Study for Modelling of Impact Assessment of Transportation Projects, by Mr. Velmurugan. S., 1995.
3. Expert Systems for Urban Route Network design and Scheduling of Bus Services, by Mahesh Dashora 1995.
4. Evaluation of Traffic Management Schemes for a Metropolitan City, by Mrs. V. Tare, GSITS, Indore 1997
5. Multimodal Urban Mass Transportation System for BMR, by Mr. Ramanajee, 1997.
6. Modelling and Policy Issues of Urban Area Traffic Congestion, by Maitra Bhargab 1997.
7. Micro-Simulation Model for Residential Location and Transport Choice to Work, K. A. Raju, 1997.

8. Decision Support Systems for Urban Bus Transport Management and Planning at Route Level by Verghese George July 1998.
9. K. Singh 'Planning and Management of Regional Network in GIS Environment since July 1995
10. Integration of Sub-urban Trains and Public Buses at Suburban Railway Station in Mumbai, by Prabhat Srivastava since 1997.
11. Modelling for an Integrated Urban Mass Transit System, by Ashish Verma Feb, 2005.
12. Development of Dynamic Traffic Assignment Model for Congested Urban Road Network, H. R. Varia, 2005
13. GIS for Transportation Planning and Monitoring, by R. S. Moorthy , 2006
14. A day activity scheduling procedure for travel demand analysis by Bindhu M., 2006
15. Heterogeneous traffic flow modelling automata for an arterial road by using cellular by P. J. Gundaliya, 2006.

B) MTECH. PROJECTS

1. Girish Kumar, 'A Study for Bus Travel Demand Forecasting for New Bombay, 1987.
2. Khandelwal S.S., 'Economic Evaluation of Highway Projects' - Case Study Ahmedabad - Vadodara Expressway, 1990.
3. Ashok G., 'Modelling of Urban Multimodal Mass Transport Network', July 1990.
4. R. Gajjar, 'Modelling for Urban Goods Movement', 1989-90.
5. Regi George, 'Routing and Scheduling of Municipal Solid Waste Collection and Transportation', 1989-90.
6. Bhupaish Sinha, 'Developing Computer Software Packages for Transportation Planning Process', 1989-90.
7. R. Khatawakar, 'Economic Analysis of Different Layers in Flexible Pavement', 1989-90.
8. R. Muralidhara, 'Development of a Rational and Practical Method for the Design of Flexible Pavement', 1989-90.
9. K. Kodanda, 'City Bus Route Rationalisation', 1989-90.
10. Gangadhar Murali, 'Modelling of Automatic Signalised Intersections Network', 1989-90.
11. G.O.V.S. Gupta, 'Modelling of Intercity Transport', Jan. 1991.
12. B. Vishwanath, 'Simulation of Suburban Railway Transit Network', Jan. 1991.

13. Thirupathi Kumar, 'Integrated Transport System for Urban Area', Jan. 1991.
14. Vinod Kumar A., 'Transport Technology Suitable for Urban Corridors', Jan. 1991.
15. P. Krishna Priya, 'Economic and Financial Feasibility of Private Sector Participation in Transport Projects', Jan. 1993.
16. G. Aklog, 'Scheduling of Construction Works for an Airport', Jan. 1993.
17. Sanjeev Yamadagni, 'Forecasting of Traffic and Serviceability of Road for New Bombay', Jan. 1993.
18. Kamlesh Kumar, 'Pavement Management System', Jan. 1993.
19. K. Dakshina Murthy, 'Decision Support System and Operational Management System for BEST', Jan. 1993.
20. Mallikarjuna, 'Design and Evaluation of Signalised Intersection Network Using Transyt-7', Jan. 1994.
21. P.K. Garg, 'Regional Transport Modelling for Jaipur Region', Jan. 1994.
22. A.B. Shende, 'Planning and Design of Bus Route Network for New Bombay', Jan. 1994.
23. Nagebhushan Rao, 'Traffic and Developmental (land use) impacts of Mankhurd-Belapur Railway, Jan. 1994.
24. V. Uday Kumar, 'Analysis of Demand and Supply of Bus Services at Micro Level in the Influence Area of Operation for a Depot', Jan. 1994.
25. Avadesh Singh, 'Signalised Intersection Network Design in Suburbs of Greater Bombay with TRANSYT-9', Jan 1995.
26. R. G. Motwani, 'Optimum Toll Charges for Proposed Airoli Bridge', Jan 1995.
27. R. Varia, 'Optimisation Signal Cycle Time and its Implication on Delay and Other Operational Parameters', Jan 1995.
28. Manna, 'Development of Vehicle Damage Factors for Different Axle Load Categories', Jan 1995.
29. Vijaykumar Haridas, 'Expert System for Design of Bimodal Urban Mass Transit Network', Jan 1995.
30. S. Kalyan Kumar, 'Development of Congestion Indices in Urban Network and Policy for Congestion Pricing', Jan 1995.
31. Rohit Shukla, 'Planning and Design of Public Transport Network for Nagpur', Jan 1995.
32. W. Imocha Singh, 'Mode Choice Analysis and Modelling for Nagpur', Jan 1995.
33. K. Sivanarayana, 'Comparative Study of IRC, HDM, RTIM Models for Economic Evaluation of Transportation Projects', Jan 1996.
34. V. Venkateswarlu, 'Land Use-Transport Model for Guwahati', Jan 1996.

35. Deepak Jain, 'Development of Speed-Flow Relationships for Different Categories of Roads in Bombay', Jan 1996.
36. P. Dharma Reddy, 'Evaluation of Traffic Assignment Models Applied to a Given City', Jan 1996.
37. M. Ram Gopal Reddy, 'Simulation of Coordinated Signalised Intersection Network', Jan 1996.
38. N. S. Deshpande, 'Mode Choice Modelling for Delhi', Jan 1996.
39. S. T. Shilawat, 'Crew and Vehicle Scheduling of Various Routes of a Depot (BEST)', Jan 1996.
40. M. R. Bhatt, 'Transportation Planning Study of Thane Municipal Corporation', Jan 1996.
41. Srinivas, 'Congestion Effects of parking and Pedestrians in Urban Roads.', Jan 1997.
42. Maneesh Kumar, 'Micro Simulation of Retail Service Locations in Urban Area', Jan 1997.
43. Shyam Prasad, 'Integration of Public Transport and Non-Motorised Transport Using Transportation Systems Management Strategies for Thane Municipal Corporation', Jan 1997.
44. L. C. Prasad, 'Planning for Pedestrian Traffic in a Ward of Island City.', Jan 1997.
45. V. Krishna Mohan, 'Estimation and Modelling of Travel Demand in Western Railway Suburban Services', Jan 1997.
46. P.V.Subba Rao 1997, Access Mode Choice Analysis Using Fuzzy Logic Based Neural Networks
47. M. Sukumar 1998, Planning of Bus Route Network and its Management for Guwahati City
48. B.V.R.V.H. Rao 1998, Accident Analysis for Regional Road Network Using GIS : For Development of Safety Support System
49. J. Srinivas 1998, Planning and Monitoring of Regional Road Network Using GIS.
50. Bhasker 1998, Trip Distribution Using ANN
51. Sumasaili Rao 1998, Modelling of Choice of Access Mode to Rail
52. Manoj Dhanorkar 1998, Planning for Pedestrian Movement in Station Areas
53. Hemant Sarat Chore 1998, Economic Evaluation of Mid-Block Pedestrian Crossings
54. S. Muralidhar 1999, Routing and Scheduling of Public Transport Using Genetic Algorithms
55. Amitabh Baruah 1999, Public Transport Routing for Guwahati City using TRIPS 7

56. Neeraj Kumar Baderia 1999, Comparative Evaluation of Models for Economic Analysis of Road Projects
57. J.Mandapaty Raju 1999, A Nested Logit Model of Mode Choice for Mixed Mode Travel
58. J.Anand Kumar, A Neuro-Fuzzy Model for Mode Choice
59. Srilakshmi 1999, Optimum Scheduling of Trains in Context of Sub-urban Train Network
60. Krishma Padma 1999, Calibration of Gravity Entropy Distribution Model Using Genetic Algorithm
61. Ch.V.Subba Rao 2000, Integrated Micro-simulation Land use Model using ANN.
62. Ch.V.V.Prakash 2000, Simulation of Mid-Block Pedestrian Crossings.
63. K.Nagendra Chary 2000, Traffic Assignment using SATURN: Study of the Effect of PCU Factors
64. Ibrahim Khaleellullah 2000, Micro-simulation and animation model for Urban isolated intersection
65. Vikram Srinivas Rao 2000, A Comparative Study of Traffic Assignment Techniques using TRANSCAD
66. Gundaliya P. J. 2000, Routing and scheduling of Bus Route Network.
67. Yograj Kolhe 2000, Application of Artificial Neural Networks for Trip Distribution.
68. Shankar Kumar Mishra 2001, Evaluation of Traffic Management Options for Small Networks Using TRANSYT and SATURN Packages.
69. B. Ram Kumar 2001, Environmental Impact Assessment of Transportation Projects.
70. Saikat Banerjee 2001, Optimisation of Bus Transit Network Design with Integrated Routing and Scheduling.
71. K. Srinivaslu 2001, Signal Coordination in Congested Networks with Mixed Traffic.
72. Shankar Kumar Mishra 2001, Evaluation of Traffic Management Options for Small Networks Using TRANSYT and SATURN Packages.
73. P. Pavan Kumar 2003, GIS Based Integration of Mass Transportation Systems Modeling.
74. Manoj R. Dandare 2003, Land Use Transport Planning Using GIS-TransCAD.
75. Sushil Maheswari 2004, Performance Evaluation of Toll Plaza
76. R.S.V.N.Sharma 2004, A Disaggregate Travel Demand Model for Mumbai Pune Corridor
77. Suresh Adhikari 2004, Pavement Management System In GIS Environment

78. Jayalakshmi Uradhanda,2004, Study of HDM-4: An Application to Indian Conditions
79. Sabyasachee Mishra(2005)"Travel Demand Modelling for a Metropolitan Region"
80. Maj. Harish Kumar(2005)"Geographic Information System for Pavement Management Systems"
81. Jigesh N Bhavsar(2005)" Planning for High Capacity Bus Systems in GIS and GPS Environment"
82. Amol R Patil(2005)" Congestion and Environmental Pricing of Urban Roads"
83. Anand Kumar Singh(2005)" Environmental Impact Assessment of Metro Project"
84. Nagendra (2006) Pavement Management System Using GIS AND GPS
85. Ravindra S (2006) Calibration and Application of HDM-4 Deterioration Models for Greater Mumbai Road Network
86. Nandkumar Ganapati Latne(2006) Highway network Inventory System Using GIS
87. Aditya. M. R(2007) Impact of Proposed Growth Centers on Transportation Scenario of Pune Metropolitan Area
88. G.Rajesh(2007) Evaluation Scheme for Long Term Work Zone Traffic Management Plans
89. Shelli (2007) EIA of Thane Ghodbunder road
90. Umesh (2007) Calibration and Validation of road deterioration model using HDM -4
91. Ishtiyag Gull (2007) Optimal transit route Network Design.
92. Jeetendra Wadhvani (2008) Travel Impact Assesment of Navi Mumbai International Airport
93. Padmini (2008) Behaviour Model for Pune Metropolitan Area .
94. Chirag (2008) Evaluation of Electronic Toll Collection system
95. Vishnu (2008) Road User Charge Study

C UNDERGRADUATE PROJECTS

More than 100 projects guided for B Tech students

10. LIST OF PUBLICATIONS

- 1) Dhingra S L and I. Gull (2008), Traffic Flow Theory: Historical Research Perspectives”, **TRB Symposium on The Fundamental Diagram: 75 Years, July 08-10,2008**, J.Erik Jonsson Conference Center, Massachusetts.
- 2) Dhingra S L and I. Gull (2008), “Optimal Transit Route Network Design” at **Indo-US Workshop on Advances in Mass Transit And Travel Behaviour Research (MTTBR-2008) at IIT Guwahati on 12-15 February, 2008**
- 3) Dhingra S L, Muralidhar Bindhu(2008), Gundaliya P.J. and Tom V. Mathew, “Data Structure for an Object Oriented Activity Scheduling Simulation Model at **Indo-US Workshop on Advances in Mass Transit And Travel Behaviour Research (MTTBR-2008) at IIT Guwahati on 12-15 February, 2008**.
- 4) Dhingra, S.L. and Das S (2007), “Accident Reconstruction of Pedestrian Vehicle Collision”, World Conference on Transportation Research (WCTR)
- 5) Dhingra, S.L., Sasikumar, Salini, and Sharma. S (2007), “Risk Assessment of fan Urban Transportation Infrastructure corridor in Mumbai”, World Conference on Transportation Research (WCTR), USA 2007.
- 6) Dhingra, S.L. Tom V Mathew and Gundaliya Pradip (2007), “Heterogeneous traffic representation for Micro Simulation”, World Conference on Transportation Research (WCTR), USA 2007.
- 7) Dhingra, S.L. Jigesh. B, and Sharma. S (2007), “Simulation of Bus Priority for an Urban Corridor in Mumbai”, World Conference on Transportation Research (WCTR), USA 2007.
- 8) P. J. Gundaliya, Tom V. Mathew, and S. L. Dhingra. (2007)'Heterogeneous traffic flow modeling for an arterial using grid based approach,' Journal of Advanced Transportation, (tentatively accepted).
- 9) P. J. Gundaliya, T. V. Mathew, and S. L. Dhingra(2007). 'Heterogeneous traffic flow modeling for single lane using cellular automata,' Journal of Intelligent Transportation, (under review).
- 10) Bindhu Muralidhar, Tom V. Mathew, and S. L. Dhingra(2006). 'A prototype time-space diary design and administration for a developing country,' Journal of Transportation Engineering ASCE, 132(6), 489-498, 2006.
- 11) Verma A., Dhingra S.L. (2006) “ Developing Integrated Schedules for Urban Rail and Feeder Bus Operation ”, Journal of Urban Planning and Development, American Society of Civil Engineers (ASCE). Vol.-132, No. 3 pp. 138-146.

- 12) P. J. Gundaliya, Tom V. Mathew, and S. L. Dhingra (2005). 'Methodology to find optimum cell size for grid based cellular automata traffic flow model', *Journal of Transport Europei*, 29(10), 71-79, 2005.
- 13) Verma A., Dhingra S.L. (2005) “ Feeder Bus Routes Generation within Integrated Mass Transit Planning Framework ”. *Journal of Transportation Engineering*, American Society of Civil Engineers (ASCE), Vol.-131, No.11. pp. 822-834.
- 14) Verma A., Dhingra S.L. (2005) “ Optimal Urban Rail Transit Corridor Identification within Integrated Framework Using Geographical Information Systems ”, *Journal of Urban Planning and Development*, American Society of Civil Engineers (ASCE), Vol.-131, No.2, pp.98-111
- 15) Dhingra S. L and Habtamu Melese Zelelew (2005) “Structural Evaluation of Flexible Pavements Using Falling Weight Deflectometer (FWD) ” Accepted for the ICAP 2005
- 16) Dhingra S. L (2005) “Master Planning for Mumbai Metro Towards Integrated Sustainable Development” Accepted the Third Gulf Conference on Roads (TGCR06).
- 17) Dhingra S. L Daba Shabara, and Habtamu Melese Zelelew (2005) “Predicting Flexible Pavement Performance Using Highway Development and Management (HDM-4)” Accepted the Third Gulf Conference on Roads (TGCR06).
- 18) ” Accepted for special Issue of *Journal of urban planning and development* , ASCE, will be appear in June 2005
- 19) S Mishra and Dhingra S. L. “Modelling Travel Demand for Metropolitan Region” accepted for ATRF05, Sydney, Australia
- 20) Dhingra S. L. “Strategies for Sustainable Integrated Urban mass Transit System” accepted for ATRF05, Sydney, Australia
- 21) Verma A., Dhingra S. L (2005) “Optimal Urban Rail Transit Corridor Identification within Integrated Framework Using GIS” Accepted for special Issue of *Journal of urban planning and development* , ASCE, will be appear in June 2005
- 22) Verma A., Dhingra S. L (2005) “Feeder Bus Routes Generation within Integrated Mass Transit Planning Framework”. Accepted for publication , ASCE,
- 23) Verma A., Dhingra S. L. (2005) “Suitability of Alternative systems for urban Mass transit for Indian Cities, *Transport Europei*, Quarterly journal of Transport Law, Economics and Engineering, Treste, Italy. Anno VII, No. 18, pp-4-15
- 24) Verma A., Dhingra S. L. (2005) “Urban Rail Transport Corridor Identification”. *GIS Development*, The Asian GIS Monthly, India, Vol-7, No 5. pp. 39-42
- 25) Verma A., Dhingra S.L (2005) “Scenario for urban Public transportation in future vision”, *Urban Transport Journal (Special Issue) Institute of urban transport (India) New Delhi*, Vol-4 No. 1, pp. 214-226

- 26) Gundaliya P. J., Tom V. Mathew and Dhingra S. L. (2005) "Simulating Single And Two Lane Heterogeneous Traffic using Cellular Automata", CUPUM 2005, International Conference, London U.K.(Accepted)
- 27) Bindhu M., Tom V. Mathew and Dhingra S. L. (2005) "Development of a Mixed Logit Model to Tour Mode Choice for an Urban Region", CUPUM 2005, International Conference, London U.K.(Accepted)
- 28) Ram S. Nehra, Amlan Banrejee, Ram M. pendyala and S. L. Dhingra (2004)" Analysis of Personal time-space prism Vertex Location", Travel and Land Use, Journal of the transportation research Board, Transportation research Record No: 1898, 2004.
- 29) Anand Kumar Singh & prof. S. L. Dhingra (2005), "New Concepts In Eco-Friendly Management Urban Transportation Projects" Environmental Friendly Transportation Seminar "PRITHVI 2005 Global Eco Meet" Trivandram, Kerala, February 24-25, 2005
- 30) Dhingra S. L. (2005), Integrated Multimodal Urban Mass Transit System for Sustainable Development, Environmental Friendly Transportation Seminar "PRITHVI 2005 Global Eco Meet", Trivandram, Kerala, February 24-25, 2005
- 31) Gupta S., Dhingra S.L. & Diwan S. ' ITS Applications for Sustainable Road Transportation', Proc of National Conference on Advances in Road Transportation (ART-05), NIT Rourkela, 12-13 Feb 2005, pp 174-181.
- 32) S. Maheswari , S. L. Dhingra, P. J. Gundaliya and S Mishra. 'Simulation model for evaluation of toll plaza systems ', Proc of National Conference on Advances in Road Transportation (ART-05), NIT Rourkela, 12-13 Feb 2005, pp 316-322.
- 33) Gundaliya P. J., Tom V. Mathew and Dhingra S. L. (2005) "Cellular Automat : An approach for traffic flow", START 2005, International Conference, IIT Kharagpur , INDIA.
- 34) Dhingra S. L. (2005) "Master Planning for Mumbai Metro Towards Integrated Multimodal Sustainable Mass Transit System ", START 2005, International Conference, IIT Kharagpur , INDIA.
- 35) Dhingra S. L. "Relevance and Method of Economic Analysis of Rural Roads", Expert invited paper at National Seminar on "Integrated Development of Rural and Arterial Road Network **for Socio-Economic Growth**" Indian Roads Congress, Union Ministry of Road Transport and Highways and Ministry of Rural Development, GOI, New Delhi February 25 - 27, 2005
- 36) Varia H.R., Dhingra S.L (2005) "**Signal optimization and dynamic user equilibrium traffic assignment in congested road network**" 10th WCTR 2005, at Istanbul, Turkey.
- 37) Verma Ashish, Gundaliya P. J. and Dhingra S. L. (2005) "**Optimal design of feeder routes for urban rail transit stations using genetic algorithm**" 10th WCTR 2005, at Istanbul, Turkey.

- 38) Karunakaran Sheela and Dhingra S. L. “**Environmental Impact assessment of MRTS Thane in GIS platform**” 10th WCTR 2005, at Istanbul, Turkey.
- 39) Shrivastav P and Dhingra S. L. (2005) “**A heuristic algorithm for development of feeder routes**” 10th WCTR 2005, at Istanbul, Turkey.
- 40) Gundaliya P. J. , Tom V. Mathew and Dhingra S. L. (2005) “**Heterogeneous traffic flow modelling using Cellular Automata**”, 10th WCTR 2005, at Istanbul, Turkey.
- 41) Bindhu M, Tom V. Mathew and Dhingra S. L. (2005) “Activity and travel pattern of the residents of the city in a developing country”, 10th WCTR 2005, at Istanbul, Turkey.
- 42) Varia H.R., Dhingra S.L “**Dynamic User Equilibrium Traffic Assignment on Congested Multi-destination Network**”, J. of Transportation Engg, ASCE, Vol-130, No.2, pp.211-221, March/April 2004.
- 43) Varia H. R. and Dhingra S. L. "Dynamic Optimal Traffic Assignment and Signal Time Optimization Using Genetic Algorithms", Computer aided Civil and Infrastructure Engineering(CACAIE), Blackwell Publishing, Malden-MA-USA, Volume 19, 260-273.
- 44) Dhingra S.L, Sachin Sancheti, Sushil Maheshwari “**Economic Feasibility of High Capacity Bus Corridor System for Mumbai City**”, 2nd International Gulf Conference on Road, Abu Dhabi, 14-19 March 04.
- 45) Dhingra S.L, Sachin Sancheti, Jayalaxmi U. “**Comparative Evaluation of Economic Analysis Models**”, 2nd International Gulf Conference on Road, Abu Dhabi, 14-19 March 04.
- 46) Dhingra S.L, Sushil Maheshwari, Abhishek Bhargava, Shankar Mishra “**Evaluation of Traffic Management Option for a Small Network Using SATURN and TRANSYT Software Packages**”, International Conference on Transportation System, IIT Madras, 18-20 Feb. 04.
- 47) Dhingra S.L, Sushil Maheshwari “**Methodology of Environmental Impact Assessment for Transportation Projects**”, National Seminar on Environmental Pollution, CRRRI New Delhi, 19-20 Sep 03.
- 48) Verma A., Dhingra S.L.(2004),"Planning for an Integrated Urban Mass Transit System in GIS Environment", 7th Annual International Conference "Map India 2004" 28-30 January 2004, New Delhi, India.
- 49) Dhingra S.L. “**EIA Methodology for Sustainable Transport**”, Key-Note Speaker and Guest of Honour at National Conference on “Urban Air Pollution: Issues & Management”, NIT Surat, 11-13 Dec. 2003..
- 50) Dhingra S.L. “**Relevance and Method of Economic Analysis of Rural Roads**”, Expert invited paper at Seminar on Integrated Development of Rural and Arterial Road Network for Socio-Economic Growth, IRC, New Delhi, 5-6 Dec. 2003, pp.I-187-208.

- 51) Dhingra S.L. “**EIA Methodology for Sustainable Transport**”, Key Note Paper at Two Days Seminar on Urban Transportation Environment, MSU Baroda, 13-14 March 2004.
- 52) Dhingra S.L. “**Environmental Impact Assessment for Sustainable Transport**”, Key Note Paper at National Conference on Urban Transport and the Environment, K.L.E. Society’s College of Engineering Belgaum, 5-7 June 2003.
- 53) Dhingra S.L. “**Preparation of DPR: Investigations**”, CEP Training Course on Planning, Design, Construction and Maintenance of Rural Roads, TSE IIT Bombay, 20-22 October 2003.
- 54) Dhingra S.L. “**Problems and Issues with Asphalt Pavements**”, **Invited speaker** at One Day Seminar on What Ails Asphalt Roads, The Institution of Engineers (I), Mumbai, 13 Dec. 2003.
- 55) Verma A., Dhingra S. L.(2003), “**GIS for Identification of Demand-Oriented Urban Rail Transit Corridor**”, 6th Annual International Conference “*Map India 2003*” 28-31, January 2003 New Delhi, India.
- 56) Verma A., Dhingra S.L.(2003), “**Optimal Locating Urban Rail Transit Alignment Using GIS**”, Institute of Transportation Engineers 2003, Annual Meeting and Exhibit, 24-27 August 2003, Seattle WA, USA

- 57) Dhingra S.L. “**Planning for an Eco-friendly Integrated Urban Mass Transit System**”, **Invited paper** at 2nd IUT Annual Congress on Integrated Mass Transit System, New Delhi, 5-6 Feb. 2004.
- 58) Bindhu M., Dhingra S.L., Tom V.M. “**A New Activity Diary Format Design in the Context of Developing Cities**”, International Conference on Transportation Systems Planning and Operation, IIT Chennai, 18-21 Feb. 2004.
- 59) Gundaliya P.J., Dhingra S.L., Tom V.M. “**Application of Cellular Automata in Traffic Flow Modelling**”, International Conference on Transportation Systems Planning and Operation, IIT Chennai, 18-21 Feb. 2004.
- 60) Dhingra S.L. “**Master Plan for Metro Project**”, ASCI-Harvard Workshop on Transportation, Land Use and Environment: Integrated Planning for Indian Cities, Administrative Staff College of India, Hyderabad, 29-31 Jan. 2004.
- 61) Dhingra S.L. “**EIA for Sustainable Transport**”, **Key Note Speaker** at National Seminar on Strategies in Traffic Engineering and Management, M. S. Ramaiah Institute of Technology, Bangalore, 16-17 Feb. 2004.
- 62) Dhingra S.L. “**Master Plan for Mumbai Metro**”, **Key Note Speaker** at National Seminar on Strategies in Traffic Engineering and Management, M. S. Ramaiah Institute of Technology, Bangalore, 16-17 Feb. 2004.
- 63) Shrivastava Prabhat and Dhingra S. L. (2002), “ Development of coordinated schedules using Genetic Algorithms” ACSE journal of Transportation Engineering, USA, Jan/Feb 2002, Vol 128, No. 1, pp. 89-96.

- 64) Shrivastava Prabhat, Dhingra S.L. and Gundaliya P. J., (2002), “ Application of Genetic Algorithm for Scheduling and Schedule co-ordination problems”, Journal of Advanced Transportation, Vol.36, No.1, pp.23-41.
- 65) Verma A., Dhingra S. L.(2002),"**GIS Technology for Transportation and Its Trends**", All India Seminar on Remote Sensing and Geographical Information System techniques, The Institution of Engineerings(India), Indore, India
- 66) Verma A., Dhingra S.L.(2004),"**Comprehensive Review of Various Urban Mass Transit Modes** ", All India Workshop on Management of urban Infrastructure. The Institute of Engineers(India), Belgaum, India
- 67) K. V. Krishna Rao, Bhargab Maitra, Prof. P. K. Sikdar and Prof. S. L. Dhingra (2002),” Estimation of Traffic and Toll Sensitivity for a Proposed Major Urban Transport Infrastructure – A case of BWSL, Mumbai”, India Road Congress, Vol 63-1, pp. 195-235.
- 68) Verma A., Dhingra S.L.(2002), "Study of Alternative Systems for Urban Mass Transport", *International Conference on Advances in Civil Engineering (ACE-2002)*, IIT Kharagpur, India, pp.949-957.
- 69) Verma A., Dhingra S.L., "GIS for Transportation: Background and Trends", Accepted for publication in *Highway Research Board*, Indian Roads Congress, India.
- 70) Verma A., Dhingra S.L.(2001), "Suitability of Alternative Systems for Urban Mass Transport for Indian Cities", *Trasporti Europei*, Quarterly Journal of Transport Law, Economics and Engineering, Trieste, Italy, Anno VII, No.18, pp.4-15.
- 71) Shrivastava Prabhat and Dhingra S. L. (2001), “ Development of feeder routes for suburban railway stations using heuristic approach” ACSE journal of Transportation Engineering, USA, July/August 2001, Vol 127, No. 4, pp. 334-341.
- 72) Varia H. R , Dhingra S. L. and Sikdar P. K. “ Effect of Signal Cycle Time Variation on Delay at Isolated Intersection – A Case Study” Highway Research Board, IRC, June 2001, Number 64, pp.87-96.
- 73) Verma A., Dhingra, S.L. (2001), ‘Study Of GIS Applications To Transportation: A Comprehensive Review’, Presented at 9th WCTR, Seoul, South Korea.
- 74) Vilas V. Karjinni, Mr. Ashish Verma, Dr. O.P.Bhatia and Dr. S.L.Dhingra (2001), ‘A New Approach For House Hold Data Collection Of Intermediate City: A Case Study’, Presented at 9th WCTR, Seoul, South Korea.
- 75) Dhingra, S.L., Srilaxmi, K., Shrivastava Prabhat (2001), ‘Optimal Scheduling of Trains in the Context of Suburban Train Network’, Presented at 9th WCTR, Seoul, South Korea.

- 76) Gundaliya, P.J., Dhingra, S.L., Shrivastava Prabhat (2001), 'Optimal Design of Bus Transit Network Using Genetic Algorithm', Presented at 9th WCTR, Seoul, South Korea.
- 77) Dhingra, S.L. and Shrivastava Prabhat (2001), 'Integration of Sub-urban Trains and Public Buses at Suburban Railway Station in Mumbai', Presented at 9th WCTR, Seoul, South Korea.
- 78) Dhingra, S.L., Prasad Rao, K.V. (2001), 'Comparative Evaluation of Models for Economic/Financial Appraisal of Transportation Projects', Presented at National Seminar on Challenges for Road Transport in 21st Century, Thapar Institute of Technology, Patiala, India.
- 79) Dhingra, S.L. and Shrivastava Prabhat (2001), 'Application of Computers and Advanced Techniques in Transportation Engg.', Presented at National Seminar on Challenges for Road Transport in 21st Century, Thapar Institute of Technology, Patiala, India.
- 80) Dhingra, S.L. and Shrivastava, P. (2001), 'Integration of Urban Mass Transportation System', Seminar on National Connectivity Vision: Surface Transportation and Communication, Indian National Academy of Engineering, New Delhi.
- 81) Maitra Bhargab, Sikdar P.K. and Dhingra S. L. " Potential Rationalization of on-street parking on urban roads" *Trasporti Europei Anno VI /n.16/ dicembre 2000* , pp 34-39.
- 82) Verma, A., Dhingra, S.L., (2000), 'A Comprehensive Review of Various Urban Mass Transit Modes', National Workshop on Urban Infrastructure Management, Institution of Engineers, Belgaum.
- 83) Gundaliya P. J., Shrivastava Prabhat and Dhingra S.L. (2000), " Model for simultaneous routing and scheduling using Genetic Algorithm" *Trasporti Europei, Quarterly Journal of Transport Law, Economics and Engineering, Anno VI, n 16, dicembre 2000* , pp 10-19.
- 84) Shrivastava Prabhat and Dhingra S.L.(2000) "An Overview of bus routing scheduling techniques" *Highway Research Bulletin, Number 62, June 2000*, pp 65-90.
- 85) Prof. S. L. Dhingra, (2000) 'Travel Demand Forecasting for Urban Rapid Mass Transit System: Case Study of Mumbai Metro', TPMDC-2000, IIT Bombay.
- 86) Prof. S. L. Dhingra (2000), 'Transportation Infrastructure Projects in Mumbai: Conception to Implementation.', TPMDC-2000, IIT Bombay.
- 87) Shrivastava Prabhat and Dhingra S. L. , " An approach for integration of public buses and suburban train - a case study of Mumbai" *Archives of Transport, Quarterly, published by Polish Academy of Sciences, Vol 12, issue 2, Warsaw 2000*, pp 55-68.

- 88) Dhingra, S.L., and Sikdar, P.K. (2000), 'Travel Demand Forecasting for Urban Rapid Mass Transit System: Case Study of Mumbai Metro', All India Seminar on Urban Mass Transit Systems, The Institution of Engineers, Mumbai.
- 89) Dhingra, S.L. and Shrivastava Prabhat (2000), 'Development of a Model for Operational Integration of Public Transport Mode- A Case Study of Mumbai', All India Seminar on Urban Mass Transit Systems, The Institution of Engineers, Mumbai.
- 90) Moorthy, R.S., Dhingra, S.L., Krishna Rao, K.V. (2000), 'Multimodal Coordinated Urban Mass Transportation Planning in GIS Environment', All India Seminar on Urban Mass Transit Systems, The Institution of Engineers, Mumbai.
- 91) Verma A., Dhingra, S.L., 'A Review of the State of Art of Metropolitan Transit Alternatives', All India Seminar on Urban Mass Transit Systems, The Institution of Engineers, Mumbai.
- 92) Dhingra, S.L., Prasad Rao, K.V. (2000), 'Comparative Evaluation of Models for Economic/Financial Appraisal of Transportation Projects', Seminar on Financing and Operation of Highway in 21st Century, IRC, New Delhi.
- 93) Dhingra, S.L. (2000), 'Concept Paper for Model Legislation for Feasibility of Unified Metropolitan Transport Authority (UMTA)', Journal of Urban Transport, New Delhi.
- 94) Shrivastava, P. and Dhingra, S.L. (2000), 'Coordinated Bus Services with Rail Corridor', Journal of Urban Transport, New Delhi.
- 95) Dhingra S.L. (2000), 'Fast Track Fly-Overs and Other Mega Projects in Mumbai and Maharashtra', Journal of Urban Transport, New Delhi.
- 96) Sharma N.K., Kumar, V., Dhingra, S.L., (2000) 'A Rational Approach for Rural Road Network Planning in System's Framework', International Seminar on Accessibility and Rural Development Planning, BITS Pilani, India.
- 97) Dhingra, S.L. and Shrivastava Prabhat, "Modelling for Co-ordinated Bus Route Network for Suburban Railway Stations- Development of Feeder Routes", Accepted for Publication in ASCE Journal of Transportation Engineering, USA.
- 98) Dhingra, S.L. and Shrivastava Prabhat , "An Overview of Bus Routing and Scheduling Techiques", Highway Research Bulletin No.62, 2000, Journal of Indian Road Congress.
- 99) Shrivastava Prabhat and Dhingra S.L. (December 1999), "**Modelling for Integrated Bus- Train Network for Mumbai**", The 4th Conference of the Hong Kong Society for Transportation Studies on Transportation Science and Technology into the next Millenium to be held on Dec 4, 1999.
- 100) Shrivastava Prabhat and Dhingra S.L.(Nov 1999), "**Modelling for co-ordinated Bus route Network for Sub-urban railway corridors**", International conference on civil and environmental engineering – new frontiers and

challenges to be held from 8-12 Nov 1999 at Asian Institute of Technology, Bangkok, Thailand.

- 101) Dhingra S.L. and Shrivastava P.(October,1999), “**Application of advanced techniques for urban transportation mobility planning**”, International Conference on Modelling and Management in Transportation held in Poland in Oct. 12 – 16.
- 102)Shrivastava P. and Dhingra S.L. (October 1999), “**An Approach for Integrated Public Transport System - A Case Study of Mumbai**”, International Conference on Modelling and Management in Transportation held in Poland in October 12 – 16.
- 103)Dhingra S.L. and Shrivastava Prabhat (1999), “ **Modelling for co-ordinated bus – train network**” 6th International conference on computers for urban planning and urban management (CUPUM99), 8th Sept.1999 to 11th Sept. 1999 at Venice Italy.
- 104)Bhargab Maitra, P.K.Sikdar and S.L.Dhingra (1999), “Modelling Congestion on Urban Roads and Assessing Level of Service”, Journal of Transportation Engg. ASCE, Nov/Dec, 1999, pp.508-514.
- 105)Dhingra S.L. and Shrivastava Prabhat (May1999), “**A discussion on urban bus routing and scheduling techniques**”, Urban Mobility professional Magazine published by Urban Mobility Network group, Netherlands
- 106)Dhingra S.L. and Shrivastava Prabhat (October 1998), “**Use of Advanced optimization techniques for bus transit route network design**” Urban Mobility professional Magazine published by Urban Mobility Network group, Netherlands.
- 107)Dhingra, S.L., Raju, K.A. and Sikdar, P.K., ‘ANN- A New Approach to Model Residential Location Choice’ 8th WCTR, Belgium, July 12th-17th, 1998.
- 108)Dhingra, S.L. and Ramanajee, M. ‘Evaluation of Utility of Mode Using Fuzzy Integrals’, 8th WCTR, Belgium, July 12th-17th, 1998.
- 109)Maitra, B., Sikdar, P.K. and Dhingra, S.L., ‘Modeling Congestion on Urban Roads Under Different Levels of On-Street Parking’, 8th WCTR, Belgium, July 12th-17th, 1998.
- 110)Singh, A.K., Sikdar, P.K. and Dhingra, S.L., ‘Database for Planning and Management of Regional Transport Network in GIS Environment’, 8th WCTR, Belgium, July 12th-17th, 1998.
- 111)Dhingra S.L. and Shrivastava(July 1998), “**Application of advanced Techniques to Urban Transportation Mobility Planning: A vision for the Millenium**” Urban Mobility professional Magazine published by Urban Mobility Network group, Netherlands
- 112)Shrivastava Prabhat and Dhingra S.L. (1998), “**An approach for Intermodal co-ordination**”, Proceedings, 3rd International workshop on Transportation

Planning & Implementation Methodologies for developing countries: Emerging Trends, pp.121-135.

- 113) Bhargab Maitra, Sikdar, P.K. and Dhingra, S.L., 'Modelling of Congestion: A Tool for Urban Traffic Management', 5th International Conference on Computers in Urban Planning and Urban Management (CUPUM-97), IIT Bombay.
- 114) Dhingra, S.L. and Regi George, 'Network and Vehicle Routing for Municipal Waste Collection and Transportation', 5th International Conference on Computers in Urban Planning and Urban Management (CUPUM-97), IIT Bombay.
- 115) Subba Rao, P.V., Sikdar, P.K., Krishna Rao, K.V. and Dhingra, S.L., 'Another Insight into ANN Through Behavioural Analysis of Access Mode Choice', 5th International Conference on Computers in Urban Planning and Urban Management (CUPUM-97), IIT Bombay.
- 116) Singh, A.K., Sikdar, P.K. and Dhingra, S.L., 'Strategising Regional Road Network Improvement Using GIS', 5th International Conference on Computers in Urban Planning and Urban Management (CUPUM-97), IIT Bombay.
- 117) Raju, K.A., Sikdar, P.K. and Dhingra, S.L., 'Micro-Simulation of Residential Location Choice and its Variation', 5th International Conference on Computers in Urban Planning and Urban Management (CUPUM-97), IIT Bombay.
- 118) Mahesh Dashora and Dhingra, S.L., 'Expert System for Bus Routing and Scheduling', 5th International Conference on Computers in Urban Planning and Urban Management (CUPUM-97), IIT Bombay.
- 119) Varghese George, Dhingra, S.L., and Sikdar, P.K., 'A Semantic Data Modelling Approach for the Design of an Advanced Information System for Performance Evaluation in Urban Bus Transport', WCTR-8 International Conference, 1998, Antwerp, Belgium.
- 120) Dhingra, S.L. and Ramanajee, M., 'A Fuzzy Measure Based Solution Approach to a Multi Modal Analysis Problem', Journal of Advanced Transportation, 1998, Alberta, Canada.
- 121) Dhingra, S.L., Marwah, B.R., and Palaniswamy, S.R., 'Simulation of Scheduling of Urban Bus Transit Network-A Case Study Scheduling Model', Journal of Advance Transportation (Accepted for publication).
- 122) A.K. Singh, P. K. Sikdar and S. L. Dhingra 'GIS Database for Planning and Monitoring of Regional Road Network', First International Conference of Managing Enterprises-Stakeholders, Engineering, Logistics & Achievemnets (ME-SELA-97), U.K, 22-24 July 1997
- 123) S. L. Dhingra and M. Ramanajee, Ranking and Choice With Qualitative Attributes Using Fuzzy Functions First International Conference on Operations and Quantitative Management (ICOQM), Jaipur, India, Jan. 5-8 1997.

- 124)Tare, V., Bhatia O. P. and Dhingra, S. L., 'Traffic Management Study through Development of Desire line Diagram and Different Trip distribution Matrices for Indore City', CODATU-VII, International Conference, New Delhi, Feb. 12-16, 1996.
- 125)Dhingra, S.L. and B. Kodanada, 'City Bus Route Rationalisation', NCOTTS-96, Bombay University, 1996.
- 126)Manish Kumar, S. L. Dhingra and P. K. Sikdar, NMT for Sustainable Metropolitan Transport, All India Seminar on Metropolitan Transportation Startegies, 28-29 June 1996, Bombay.
- 127)K. A. Raju, P. K. Sikdar and S. L. Dhingra, Artificial Neural Network for Mode Choice All India Seminar on Metropolitan Transportation Startegies, 28-29 June 1996, Bombay.
- 128)Pushkar Murthy and S. L. Dhingra, Impact Analysis of Advances in Transport Technologies to Mumbai's Traffic and Transportation Problems. All India Seminar on Metropolitan Transportation Startegies, 28-29 June 1996, Bombay.
- 129)A.K. Singh, P. K. Sikdar and S. L. Dhingra 'GIS Technology for Transpotation Network Information System and Management' National Seminar on "Perspective Planning for Road Development in India", Organised by IRC, Vigyan Bhavan, New Delhi Oct 7-8, 1996
- 130)A.K. Singh, P. K. Sikdar and S. L. Dhingra 'Planning and Management of Regional Network in GIS Environment" TPMDC, IIT, Bombay, Dec 4-7, 1996.
- 131)S. L. Dhingra and P. V. Subba Rao Urban Transportation Planning Models: State of the art, TPMDC, IIT, Bombay, Dec 4-7, 1996.
- 132)S. L. Dhingra, P. K. Sikdar and M. Sukumar, Landuse Transportation Planning Models, TPMDC, IIT, Bombay, Dec 4-7, 1996.
- 133)Bhargab Maitra, P. K. Sikdar, S. L. Dhingra, Modelling Urban Area Traffic Congestion and Policy Issues, TPMDC, IIT, Bombay, Dec 4-7, 1996.
- 134)K. A. Raju, P. K. Sikdar and S. L. Dhingra Micro-simulation model for Residential Location and Transportation Choice to Work, TPMDC, IIT, Bombay, Dec 4-7, 1996.
- 135)Varghese George, S. L. Dhingra, P. K. Sikdar An Advanced RDBMS Approach for design of an information System for Performance Evaluation in Urban Public Transport. TPMDC, IIT, Bombay, Dec 4-7, 1996.
- 136)George Verghese, Dhingra, S. L. and Sikdar, P. K., 'Development of a Decision Support System for Urban Transport Planning and Monitoring', CODATU-VII, International Conference, New Delhi, Feb. 12-16, 1996.
- 137)Raju, K. A., Sikdar, P. K. and Dhingra S. L., 'Mode Choice Model using Artificial Neural Network (ANN)', International Conference on Urban Planning and Urban Management, Melbourne, Australia, July 11-15, 1995.

- 138)Maitra, B., Sikdar, P. K. and Dhingra, S. L., 'Quantification of Urban Road Congestion', 7th World Conference on Transport Research, Sydney, Australia, July 16-21, 1995.
- 139)Dashora, M. and Dhingra, S. L., 'An Expert System for Mass Transit Network Design', 7th World Conference on Transport Research, Sydney, Australia, July 16-21, 1995.
- 140)Ramanajee, M and Dhingra, S.L, 'Multi Attribute Weightage Analysis in a Mode Choice Environment', 7th World Conference on Transport Research, Sydney, Australia, July 16-21, 1995.
- 141)Dhingra, S.L., Sikdar, P. K. and Orpe, S. G., 'Issues and Policies for Structural and Functional Concrete Roads', National seminar on "Concrete Roads-Emerging Trends", Indian Concrete Institute, Maharashtra Local Centre, Institution of Engineers (India), Bombay, April 29, 1995.
- 142)Dhingra, S. L. 'Issues and Policies for Private Sector Participation in Urban Mass Transportation Projects', Two Day National Seminar on "Urban Mass Transportation: Policies and programmes", Organised by the Institution of Engineers (India), Karnataka State Centre, Bangalore, Sept. 22-23, 1994.
- 143)Yamdagni, S., Sikdar, P. K. and Dhingra, S. L., 'Updating of Travel O-D data for Greater Bombay', NCOTTS-93 (National Conference on Transportation Systems Studies: Analysis & Policy), Vishakapatnam, Dec. 11-12, 1993.
- 144)Maitra, B., Sikdar, P. K. and Dhingra, S. L., 'Quantification of Congestion and its Prediction', NCOTTS-93 (National Conference on Transportation Systems Studies: Analysis & Policy), Vishakapatnam, Dec. 11-12, 1993.
- 145)Dhingra, S. L., Marwah, B. R. and Palaniswamy, S. P., 'Simulation Model for Bus Transit Network - I Modeling' Journal of Advanced Transportation, Vol-27, No-2, Summer, 1993.
- 146)Dhingra, S. L.,Karjinni V.V. and Shanthal, K., 'Two-Wheeler Equivalent for Vehicles of Developing Urban Centres', Presented at the CODATU VI (The conference on the Development & Planning of Urban Transport), Tunis, Feb. 15-19, 1993.
- 147)Dhingra, S. L., Krishna Priya, P., 'Issues of Public Versus Private Financing of Urban Transportation Systems', National Seminar on Urban Transportation, organised by The Institution of Engineers (INDIA), New Delhi, Feb. 1993.
- 148)Dhingra, S. L.,Mujumdar, P. and Gajjar Rajesh, 'Time Series Modelling of Urban Attracted Truck Movements', Journal of Advanced Transportation, Vol.27-3 (Special issue), Winter, 1993.
- 149)Dhingra, S. L. and Velumurugan, S., 'Modelling for Impact Assessment of Transportation Project', at the 6th World Conference on Transportation Research, Lyon, June 29th -July 3rd 1992.

- 150) Dhingra, S. L., and Karjinni Vilas, 'A Study of Urban Bus Transport Network' presented at the 6th World Conference on Transport Research, Lyon, France, June 29th - July 3rd 1992.
- 151) Dhingra, S. L., Krishna Priya, P., 'Private Participation in Transportation Projects - Financial Policy Issues', presented in the Workshop on Private Participation in Transportation Projects - Administrative, Legal and Financial Policy Issues, IIT, Bombay, 14th November 1992.
- 152) Dhingra, S. L., Krishna Priya, P., 'Legal and Administrative Measures Required for Private Financing of Transport Projects', at Workshop on Transport Policies and Issues, IIM, Ahmedabad on April 6-10, 1992.
- 153) Dhingra, S.L. and Khandelwal, S.S. 'Environment Impact Assessment of Ahmedabad Vadodara Expressway An Analysis', Indian Highways, IRC, New Delhi. April, 1992
- 154) Karjinni, Vilas., Neelgar Basavaraj & Dhingra, S.L., 'Criteria for Evaluation of Route Alternatives : A Graph Theoretic Approach', presented at 6th World Conference on Transport Research, June 29 - July 3, 1992, Lyon, France.
- 155) Dhingra, S.L. and S. Ramanajee, 'Modelling for multimodal transportation network using fuzzy set, A.I. and Expert Systems', for 6th World Conference on Transport Research, Lyon, France June 1992.
- 156) Dhingra S.L. and Khandelwal, S.S., 'Economic and Tool Viability of Expressway Project in India', Internattional Seminar on 'Expressway/Highspeed Facilities in Developing Countries, Organised bu IRC & VITA (Paris) June 13-16 1991, Bangalore.
- 157) Tare, V., Bhatia, O.P., and Dhingra, S.L., 'A Framework for the Evaluation of Alternative Traffic Management Scheme for a Metropolitan City in a Developing Country', Conferences on the Development and the Planning of Urban Transport in Developing Countries (CODATU V) held in Sao Paulo, Brazil, Sept. 24-28, 1990.
- 158) Dhingra, S.L. and Bhalla, M.K., 'Economic Feasibility of Higher Axle Load Limits for Indian Roads', Fifth World Conference on Transportation Research (WCTR), Yokohama, Japan, July 10-14, 1
- 159) Dhingra, S.L., Girish Kumar, and Jha, R.K., 'A Study for Bus Travel Demand Forecasting for a Developing City', Fifth World Conference on Transportation Research (WCTR), Yokohama, Japan, July 10-14, 1989.
- 160) Dhingra, S.L. and Deb, S.K., 'A Study for Modelling of Integrated Multimodal Mass Transport System', Fifth World Conference on Transportation Research (WCTR), Yokohama, Japan, July 10-14, 1989.
- 161) Dhingra, S.L. and Aggarwal, Anil Kumar, 'Determination of Optimal Augmentation Plan for Depots and Routing of Buses from depots to Starting Points of Routes to Minimize the Total Expenditure over a Planning Horizon - A Capacitated Trans. Network Approach', Applied Mathematics, 20(2) : pp.111-120, Feb. 1989.
- 162) Dhingra, S.L. and Anurag Sharma, 'Urban Transportation Planning and Evaluation', National Conference on Transportation System Studies, Analysis and Policy, IIT Bombay, Dec. 15-17, 1988.

- 163) Sharat, Y., Jha, R.K., Reddy, A.R., and Dhingra, S.L., 'Impact of Telecommunications on Transportation Systems A Case Study of New Bombay', National Conference on Transportation System Studies, Analysis and Policy, IIT Bombay, Dec. 15-17, 1988.
- 164) Balachandra Markande, Dhingra, S.L. and Orpe, S.G., 'Economic Feasibility of Water Transportation Across Thane Creep by Hovercrafts', National Conference on Transportation System Studies, Analysis and Policy, IIT Bombay, Dec. 15-17, 1988.
- 165) Dhingra, S.L. and Venkatesan, S., 'Economic Appraisal of Certain Highway Projects in India, IRC, Vol. 49-2, Oct. 1988.
- 166) Dhingra, S.L. and Raj Pal, 'Binder Economy in Road Construction with Tar and Antistripping Agents', Highways, Vol. 16, No. 8, IRC, Aug. 1988, pp. 5-16.
- 167) Dhingra, S.L., Cherian Thomas and Orpe, S.G., 'Simulation Modelling of Suburban Trains', All India Seminar on 'Railway Engineering in India Corporate View in AD 2001, I.E., Calcutta, Nov. 24-25, 1988.
- 168) Dhingra, S.L. and Gupta, R.G., 'Study of Economic Feasibility of a Transport Technology to Metropolitan Corridor for a Developing Country : A Case Study of Delhi', World conference on Transport Research, Vancouver, Canada, May 1986.
- 169) Dhingra, S.L. and Deb, S.K., 'A Study for Modelling of Integrated Multimodal Urban Mass Transit Network Using Graph Theoretic and Fuzzy Set Techniques', World Conference on Transport Research, Vancouver, Canada, May 1986.
- 170) Dhingra, S.L. Bains Sunil K., 'Analysis of Attributes of Mass Transportation System - Case Study', International Conference on Transportation System Studies, Dec. 18-22, 1986, IIT New Delhi (ICOTTTS).
- 171) Dhingra, S.L., 'Transportation Communication Interaction An Overall View', One day Group Discussion Sessions on Transportation Communication Interaction, Dec. 10, 1986, IIT Bombay.
- 172) Deb, S.K. and Dhingra, S.L., 'Mode Choice in Traffic Corridor', National System Conference, 1985, Allahabad.
- 173) Deb, S.K. and Dhingra, S.L., 'Intra Urban Coordinated Multimodal Mass Transit System', National Seminar cum Workshop on 'Intermodal Transport Coordination System 2001 AD with Special Reference to Developing countries', Patna, April 14-15, 1985.
- 174) Deb, S.K. and Dhingra, S.L., 'Metalevel Analysis for Implementing Decision in Multimodal Mass Transit System', National Seminar cum Workshop on 'Intermodal Transport Coordination System, 2001 AD with Special Reference to Developing Countries', Patna, April 14-15, 1985.

- 175)Dhingra, S.L., 'Improving Bus Passengers', Safety in the Indian Context 2nd International Symposium on 'Transportation Safety', Athens, Greece, June 17-21, 1985.
- 176)Dhingra, S.L. and Deb, S.K., 'A Study for the Application of Fuzzy Set Theory for Accident Analysis of Multimodal Mass Transit System', Proceedings of the Second International Symposium on Transportation Safety, Athens, Greece, June 17-21, 1985.
- 177)Dhingra, S.L., 'Climatic Factors in Hill Road Construction and Binder Economy', IRC Seminar on Construction of Roads in Hilly Areas, Nainital, May 1985.
- 178)Dhingra, S.L., 'Functional Planning of Rural Road Network', Seminar on Roads and Road Transport in Rural Areas, Nov. 19-21, 1985, CRRI, New Delhi.
- 179)Dhingra, S.L. and Gupta, R.G., 'Economics of Urban Transportation in Super Metropolitan Cities with Special Reference to Delhi', to International School of Transp. Planning on the Economics of Transport in 1980's Oct. 1-6, 1984, AMALFI ITALY.
- 180)Deb, S.K. and Dhingra, S.L., 'Fuzzy Set Techniques for Selection of Mode for Multimodal Mass Transit Systems Case Study', IEEE Centenary Publication ((India Council), Calcutta, Dec. 1984.
- 181)Dhingra, S.L. and Joshi, M.D., 'Errors in Measurement by Subtense Bar', The Institution of Surveyors, Nov. 1984.
- 182)Dhingra, S.L. and Jain Manoj, 'A Study for the Development of Methodology of Coordinated Biomodal Mass Transit Network Planning for Delhi', Min. of Shipping, IIT Sponsored Symposium on 'Future Landuse Transport Structure of Delhi', Dec. 12, 1983, IIT Delhi.
- 183)Dhingra, S.L., Marwah, B.R. and Palaniswamy, S.P., 'Routing and Scheduling of city Bus Transit Network', Min. of Works and Housing and TCPO sponsored Workshop on 'Transportation Research Identification of Priority Areas', School of Planning and Architecture, March 25-26, 1982.
- 184)Dhingra, S.L., Marwah, B.R. and Palaniswamy, S.P., 'A Heuristic Approach for Generating Bus Transit Network', National Symposium on 'Transportation Systems Studies : Analysis and Policy', Dec. 4-6, 1981, IIT Delhi.
- 185)Dhingra, S.L., 'Additives and Binder Economy for Wet Weather Roads', National Symposium on 'Binder Economy and Alternate Binders in Road and Building Construction', CRRI, New Delhi, Nov. 1981.
- 186)Dhingra, S.L., Marwah, B.R. and Palaniswamy, S.P., 'City Bus Transit Network Planning', Paper presented at International Conference on Transportation, Vigyan Bhawan, Nov. 26-28, 1980, New Delhi.

- 187)Dhingra, S.L., `Comprehensive Regional Road Transport Network Planning, Seminar on `Techniques of Development for Road Network and Methodology for the Preparation of Master Plan, UPDESCO, Lucknow, Oct. 10-11, 1980.
- 188)Dhingra, S.L., `Maintenance Problem of Flexible pavements', Seminar on Problems of Flexible Pavements', The Institution of Engineers (India), Rajasthan Center, Jaipur, Sept. 15, 1977.
- 189)Dhingra, S.L. and Dandekar, M.M., `Transportation and Urban Settlements', All India Inter Disciplinary Seminar on `Human Settlements', Univ. of Rajasthan, Jaipur, April 20 - 24, 1976.
- 190)Dhingra, S.L. and Dandekar, M.M., `Some Observations of Traffic Problems in Perspective of Jaipur City', presented at a seminar on `Traffic and Transportation Problems', The Institution of Engineers (India), Rajasthan Center, Jaipur, Feb. 25, 1976.
- 191)Dhingra, S.L. and Madan Kumar, `Design Fundamentals of Fixed Time road Traffic Signals', The Institution of Engineers (India), Rajasthan Centre, 16th Annual Number, Jan. 1976.
- 192)Dhingra, S.L. and Singh, N., `Transportation and Environment, `Commonwealth Human Ecology Council', London Supported Interdisciplinary Seminar on Human Settlements', Sponsored by UGC & DST, University of Rajasthan, Jaipur, April 25-29, 1976.
- 193)Dhingra, S.L., `Accidents Analysis for Jaipur City Roads', The Institution of Engineers, Rajasthan Centre, 14th Annual Number, Jan. 1974.
- 194)Dhingra, S.L. and Rathore, R.S., `Remodelling of International Airports for Modern Planes', Civil Engineering Construction and Public Works J1, Sept. - Oct. 1972.
- 195)Dhingra, S.L. and Golani, J.N., `Methods of Strengthening Flexible Pavements', Civil Engineering Construction and Public Works, J1, Jan - Feb., 1972.
- 196)Dhingra, S.L., `Highway Engineering Applications of Photogrammetry ', Civil Engg. Construction and Public J1., Nov. Dec., 1972.
- 197)Dhingra, S.L., `Modern Modes of Transport Posing Problems to Health and Economy', Civil Engineering Construction and Public Works, j1. May-June, 1972.
- 198)Dhingra, S.L. and Surendra Paul, `Aesthetics and Economics of Bridges, `Civil Engineering Construction and Public Works, J1. Nov. - Dec., 1971.
- 199)Dhingra, S.L. and Sharma, R.C., `Construction of Bituminous Pavements Using Wet Aggregates', Transport Communication J1. of Indian Road Congress, Annual Number, 1970.
- 200)Sharma, R.C., and Dhingra, S.L., `Construction of Wet Weather Roads', Journal of the Institution of Engineers (India), (Pb. Haryana, H.P. & Chandigarh Centre), Annual, Nov. 1969.

11. SYMPOSIA/CONFERENCES/SEMINARS ORGANISED

- 1) One day Panel Discussion on *How Safe, Comfortable, efficient economical and Tension Free our future city travel will be ?*, September 7, 1986.
- 2) One day Group Discussion Sessions on *Transport Communication Interaction*, December 10, 1986.
- 3) *International Conference on Transportation System Studies*, Dec. 18-22, 1986, IIT New Delhi (ICOTTS).
- 4) *First National Conference on Transportation Systems Studies (NCTOSS-88)*, 15-17 December 1988, IIT Bombay.
- 5) *Workshop on Private Participation in Transportation Projects (PPTP-92)*, 14th November 1992, I.I.T. Bombay.
- 6) *International Workshop on Impact Evaluation & Analysis of Transportation Projects IEATP-94*, 13-16 December 1994, I.I.T. Bombay.
- 7) *International Workshop on Transportation Planning Methodologies in Developing Countries*, 4-7 December, 1996, I.I.T. Bombay. *Fifth International Conference on Urban Planning and Urban Management*, 16-19 December, 1997.
- 8) 3rd *International Workshop on “Transportation Planning and Implementation Methodologies for Developing Countries” (TPMDC-98)*, December-98, IIT Bombay.
- 9) 4th *International Workshop on “Transportation Planning and Implementation Methodologies for Developing Countries” (TPMDC-2000)*, December-2000, IIT Bombay.
- 10) 5th *International Workshop on “Transportation Planning and Implementation Methodologies for Developing Countries” (TPMDC-2002)*, December-2002, IIT Bombay.
- 11) 6th *International Workshop on “Transportation Planning and Implementation Methodologies for Developing Countries” (TPMDC-2004)*, December-2004, IIT Bombay.
- 12) 7th *International Workshop on “Transportation Planning and Implementation Methodologies for Developing Countries” (TPMDC-2006)*, December-2006, IIT Bombay.
- 13) *IIT Golden Jubilee International Conference and 8th International Workshop on “Transportation Planning and Implementation Methodologies for Developing Countries” (TPMDC-2008)*, December-2008, IIT Bombay.

12. CHAPTER IN THE HANDBOOK

Dhingra S.L, Rao K.V.K.R., Tom V.M. “**Environmental Impact Assessment for Sustainable Transport**”, Handbook of Transport and the Environment (Eds.Hensher D.A. and Button K.J.), Vol .4, Ch.17, pp.309-329, Pergamon , An Imprint of Elsevier Science.

13. EXTRA CURRICULAR ACTIVITIES

- 1) N.C.C. Rifles for 4 years and passed Senior Division Certificates, `B' and `C'.
- 2) Passed National Civil Defence (Home) Certificate `A'.
- 3) Was Joint Secretary, Mess Executive Elect. for one year and member for one year.
- 4) President of Hindi Samiti for one year at IIT Delhi.
- 5) Associate Warden, Hostel 8, Feb. 1990 to July, 1992, at IIT Bombay.

14. PARTICIPANT IN CURRICULUM DEVELOPMENT CELL ACTIVITY

- i Developed course details for the M. Tech courses for Transp. Systems Engg., 1986-1988
- ii Participant in Workshop III, `Formulation of four year curriculum for Modern Civil Engineering Education', March 8, 1980.
- iii Participant and presented working paper in the Workshop IV, `Status of Science and Mathematics Teaching under 10+2 System, March 22, 1980.
- iv Participant in 3 day Workshop V, `A Four Year Curriculum for Modern Civil Engineering Education', May 12-14, 1980.
- v Co-ordinator Transportation Engineering Working Group for the `All India Seminar Workshop on Guidelines for Laboratory Facilities in Civil Engineering', Jan. 16-17, 1981.
- vi Participant and presented paper in one day All India Workshop on `Identifying Minimum Equipment for Supporting a Modern 4 year Civil Engineering Curriculum', July 24, 1981.
- vii Co-ordinator of Transportation Engineering Four Day Workshop on `Preparation of Laboratory Manual', Oct. 3-6, 1981, IIT Delhi.
- viii Brought out the above Laboratory Manual, 1982.
- ix Co-ordinator of 3-day All India workshop on `Identification of Source Material and Preparation of Detailed Syllabus for the Transportation Engineering Subjects of Modern Civil Engineering Curriculum', Jan. 14-16, 1983, IIT Delhi.

- x Participant in one day Workshop on `Preparation of Audio and Visual Aids for Teaching Laboratory Experiments in Soil Mechanics`.
- xi 3 day All India C.d. Workshop on `Preparation of Detailed Syllabi and Identification of Source Material in Surveying Subjects', March 16, 1984.
- xii 2 Day C.d. Workshop on `Preparation of Detailed Syllabi and Identification of Source Material for Construction Management and Management Courses', March 20-21, 1984.