

JAVED BARI, Ph.D. (USA), P.E. (USA), M.ASCE, FIEB
Professor and Former Chair, Department of Civil and Environmental Engineering
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SUMMARY OF QUALIFICATIONS

Distinguished Academic and Leadership Career: Over 30 years of combined experience in academia, administration, industry, and research, with a proven track record of elevating institutional profiles and fostering innovation in engineering education.

Global Academic Credentials: Ph.D. and M.S. from Arizona State University, USA, and a B.Sc. from BUET, with active Professional Engineer (P.E.) licenses in the USA and Bangladesh.

Strategic Leadership: Spearheaded the transformation of North South University's School of Engineering and Physical Sciences (SEPS) into a top-ranked school, achieving prestigious global rankings, including #1 in Bangladesh for Engineering as per Times Higher Education World University Rankings 2023.

Institutional Development: Led initiatives to establish cutting-edge research centers and institutions, forge international collaborations, and introduce new academic programs, significantly enhancing NSU's academic and research capabilities.

Research Expertise: Renowned expert in transportation and environmental engineering with numerous high-quality publications in leading international journals and conferences.

Policy and Strategic Planning: Instrumental in the development and implementation of strategic plans at NSU, focusing on academic excellence, faculty performance evaluation, and the integration of advanced learning management systems.

Government and Industry Experience: Early career roles in key government civil engineering departments in USA and Bangladesh, with extensive experience in project management, infrastructure development, and regulatory compliance.

EDUCATION

Ph.D. in Civil & Environmental Engineering: Arizona State University (ASU), Tempe, Arizona, USA. 2005. CGPA 3.63/4.00.

Master of Science (M.S.) in Civil & Environmental Engineering: Arizona State University (ASU), Tempe, Arizona, USA. 2001. CGPA 3.43/4.00.

Master of Engineering (M.Engg.) in Environmental Engineering: Bangladesh University of Engineering & Technology (BUET), Dhaka, Bangladesh. 30 credits' coursework completed, 6 credits' Project work incomplete due to moving to USA for another M.S. and Ph.D. 1999.

Bachelor of Science (B.Sc.) in Civil Engineering: Bangladesh University of Engineering & Technology (BUET), Dhaka, Bangladesh. 1993. First Class.

H.S.C. in Science: Dhaka College. 1986. First Class with star marks.

S.S.C. in Science: Barisal Zilla School. 1984. First Class with star marks and 3rd in the combined merit list of the Jessore board.

PROFESSIONAL REGISTRATION

- Licensed Professional Engineer (P.E.) in the USA and Bangladesh (Active Status).
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PROFESSIONAL AFFILIATIONS

- Member, American Society of Civil Engineers (ASCE), USA (Active Membership).
 - Life Fellow, Institute of Engineers, Bangladesh (IEB).
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PROFESSIONAL BACKGROUND

1. Professor, Department of Civil and Environmental Engineering (CEE)

North South University (NSU) | September 2013 – Present

- Lead courses, laboratories, and exams while mentoring students through thesis and capstone design projects.
- Conduct advanced research in road safety, pavement design, traffic studies, environmental studies, materials characterization, and in-depth evaluation of development projects.

2. Dean, School of Engineering and Physical Sciences (SEPS)

North South University (NSU) | March 2019 – March 2024

- As the longest-serving Dean of SEPS, successfully led four departments: Electrical and Computer Engineering, Civil and Environmental Engineering, Architecture, and Mathematics & Physics.
- Under my leadership, NSU and SEPS achieved recognition as the top-ranked engineering university and school in Bangladesh by the globally prestigious Times Higher Education (THE) World University Rankings 2023 (by Subject). NSU, for the first time, was ranked as the #1 university in Bangladesh for ENGINEERING (Globally, NSU 301-400; BUET 801-1000), NSU's Civil Engineering program as the #1 in Bangladesh (Globally, NSU 301-400; BUET 801-1000), Electrical and Electronic Engineering program as #1 in Bangladesh (Globally, NSU 301-400; BUET 801-1000), and Computer Science program as #2 in Bangladesh (Globally, NSU 501-600; DU 401-500 and BUET 801-1000).
- Played a pivotal role in developing strategic planning for both SEPS and NSU, establishing new specialized research groups, centers, and institute, and securing collaborations with global institutions such as the University of Texas at Arlington, Bill & Melinda Gates Foundation, Germany's DAAD and Japan's Nippon Koei among others.
- Spearheaded the introduction of the globally renowned Learning Management System "CANVAS" and managed the transition to online and hybrid teaching during the COVID-19 pandemic.
- Worked as the Convener of the NSU team that developed the Faculty Performance Evaluation System (PES).
- Served on numerous central university committees, including the NSU Syndicate, contributing to the governance and strategic direction of the university.

3. Chair (Head), Department of Civil and Environmental Engineering (DCEE)

North South University (NSU) | March 2015 – June 2017

- Managed the Department of Civil and Environmental Engineering, representing department chairs as a member of the NSU Syndicate.

4. Professor, Department Civil Engineering, and Director, South Asian Disaster Management Center

IUBAT-International University of Business Agriculture and Technology | January 2011 – August 2013

- Taught civil and transportation engineering courses while leading disaster management research projects.
- Directed policy and strategy development for the “Research Excellence Reward” system, fostering a culture of academic excellence.

**5. Faculty (Adjunct), Department of Civil, Environmental and Sustainable Engineering
Arizona State University (ASU), Tempe, Arizona, USA | January 2006 – December 2010**

- Delivered Civil Engineering courses and managed the transportation engineering lab, contributing to the academic and practical development of students.

6. Senior Transportation Engineer (Team Leader)

Arizona Department of Transportation (ADOT), Phoenix, Arizona, USA | May 2005 – December 2010

- Led the design and maintenance of pavement projects across five counties in Arizona, overseeing both flexible and rigid pavement design.
- Played a key role in incorporating the globally acclaimed new AASHTO Mechanistic-Empirical Pavement Design Guide (MEPDG) into Arizona's road design practices.

**7. Senior Teaching Associate, Department of Civil, Environmental and Sustainable Engineering
Arizona State University (ASU), Tempe, Arizona, USA | May 2001 – May 2005**

- Managed advanced asphalt binder and concrete mix testing labs, contributing to significant transportation research, including the development of the AASHTO MEPDG.

8. Assistant Engineer

Roads and Highways Department (RHD) | January 1999 – December 1999

- Supervised construction and maintenance of roads, bridges, drainage structures, and traffic control systems, ensuring compliance with safety and quality standards.

9. Assistant Engineer

Public Works Department (PWD), Bangladesh Government | February 1998 – January 1999

- Led engineering surveys for civil projects nationwide, completing comprehensive “Foundation Training” focused on government policies, ethics, and sustainable development.

10. Upazilla Engineer/Assistant Engineer

Local Government Engineering Department (LGED), Bangladesh Government | January 1994 – February 1998

- Served as Head of the Local Government Engineering Section in two Upazillas, overseeing rural infrastructure projects, including roads, bridges, public buildings, and bio-gas plants.

SELECTED PUBLICATIONS

- **Javed Bari (Primary Author & Presenter)**, Kritanta Chakma, Mir Touhidul Islam, Md. Abdullah-Al-Bashar. 2024. “Identification and Traffic Condition Evaluation of the Most Hazardous Intersections of Dhaka City”. Journal of International Road Federation (IRF). Paper to be presented by Dr. Javed Bari at the IRF Global R2T Conference, Orlando, Florida, USA, December 10-13, 2024.
- **Javed Bari (Primary Author & Presenter)**, Anik Kumar Bhakta, Mohammed Nahid Hassan, Md. Raihanul Hoque Chowdhury. 2024. “Advanced Characterization of Asphalt Binders Used in

Bangladesh”. Journal of International Road Federation (IRF). Paper to be presented by Dr. Javed Bari at the IRF Global R2T Conference, Orlando, Florida, USA, December 10-13, 2024.

- **Javed Bari (Primary Author & Presenter)**, Aseer Masnoon, Imtiaz Mehmood, Abdulla Hil Nahin. 2024. “Characterization of the Most Commonly Used 60/70 Penetration Grade Asphalt Binders of Bangladesh”. Journal of International Road Federation (IRF). Paper to be presented by Dr. Javed Bari at the IRF Global R2T Conference, Orlando, Florida, USA, December 10-13, 2024.

- **Javed Bari (Primary Author & Presenter)**, Shopnil Sultana, Md. Misbah Ul Aziz, and Kazi Newaz. 2024. “In-depth Analysis of Bus Management System from Gabtoli to Staff Quarter via Badda (Route #A-314) in Dhaka City”. Journal of International Road Federation (IRF). Paper to be presented by Dr. Javed Bari at the IRF Global R2T Conference, Orlando, Florida, USA, December 10-13, 2024.

- **Javed Bari (Primary Author)**, Faria Tabassum (Presenter), Arfaa Feezanul Islam, Salemun Bahar, Nahid Hasan Sharif, Abdullah Al Mamun. 2024. “Reusing Waste Plastics in Asphalt Binders for Road Construction”. American Society of Civil Engineers (ASCE). International Conference on Transportation and Development 2024 (ICTD 2024), Atlanta, Georgia, USA. June 15–18, 2024, pp. 338-348. DOI: 10.1061/9780784485538.030. June 2024.

- Afsara Taspia, Shadman Sakib, Md. Moshir Rahman, **Javed Bari (Primary Author)**; Kazi Md. Shifun Newaz, Faria Tabassum (Presenter). 2024. “Before-After Analysis of Highway Crashes on the Dhaka-Chattogram National Highway of Bangladesh”. American Society of Civil Engineers (ASCE). International Conference on Transportation and Development 2024 (ICTD 2024), Atlanta, Georgia, USA. June 15–18, 2024, pp. 372-379. DOI: 10.1061/9780784485514.033. June 2024.

- Afia Anzum Tithi, Sakibul Alam Sakib, Rawshan Jahan Shanto, Naim Sarker, **Javed Bari (Primary Author)**, Faria Tabassum (Presenter). 2024. “Development of a Practical Methodology for Evaluating the Conditions of Sidewalks of Dhaka City”. American Society of Civil Engineers (ASCE). International Conference on Transportation and Development 2024 (ICTD 2024), Atlanta, Georgia, USA. June 15–18, 2024, pp. 338-349. DOI: 10.1061/9780784485521.031. June 2024.

- **Javed Bari (Primary Author)**, Mehedi Hasan, Estiak Ahmed, Faria Tabassum (Co-Presenter), Asifuzzaman, Kazi Newaz. 2023. “Evaluation of the Bus Management System of Route A-317 (Diabari to Saydabad via Badda) of Dhaka City”. Journal of International Road Federation (IRF). Paper presented by Dr. Javed Bari at the IRF Global R2T Conference, Phoenix, Arizona, USA, November 14-17, 2023.

- **Javed Bari (Primary Author)**, Md. Tafshir Jaman Takib, Mishila Monsur, Md. Abdullah Al Fahad, Faria Tabassum, Kazi Newaz. 2023. “A comprehensive evaluation of road safety status of the major intersections of Azimpur to Gabtoli corridor on Mirpur Road using the iRAP road infrastructure analysis protocol”. Journal of International Road Federation (IRF). Paper presented by Dr. Javed Bari at the IRF Global R2T Conference, Phoenix, Arizona, USA, November 14-17, 2023.

- **Javed Bari (Primary Author)**, Mohammad Ashiqur Rahman, Minhaj Uddin Mahmood Siddique, Md. Jannatul Nayem, Faria Tabassum (Co-Presenter). 2023. “An evaluation of traffic sign perception among different types of road drivers in Bangladesh”. Journal of International Road Federation (IRF). Paper presented by Dr. Javed Bari at the IRF Global R2T Conference, Phoenix, Arizona, USA, November 14-17, 2023.

- Mahinur Maisha, Marium Mou, **Javed Bari (Primary Author & Presenter)**, Kazi Newaz. 2023. “Analysis of Roadway Infrastructure Management Using iRAP Protocols to Ensure Road Safety of Critical Intersections between Kuril Bishwa Road and Mouchak Bus Stoppages of Dhaka City”. Journal of American Society of Civil Engineers (ASCE). Transportation & Development Institute (T&DI) Paper. Presented by Dr. Javed Bari at the ASCE International Conference on Transportation and Development 2023, June 14-17, 2023. Austin, Texas, USA. DOI: 10.1061/9780784484876.015. pp. 161–170. USA. June 2023.

- Muneem Shahabuddin, Md. Ashraful Alam, Jannatul Ferdous Sweetey, Kazi Newaz, **Javed Bari (Primary Author & Presenter)**. 2023. “Identification and Evaluation of Past and Present Black Spots on the Dhaka-Sylhet National Highway of Bangladesh”. Journal of American Society of Civil Engineers (ASCE). Transportation & Development Institute (T&DI) Paper. Presented by Dr. Javed Bari at the ASCE International Conference on Transportation and Development 2023, June 14 – 17, 2023. Austin, Texas, USA. DOI: 10.1061/9780784484876.014. pp. 148–160. USA. June 2023.
- Md. Abtahi Rabby, Mahin Alam, Tamal Ray, **Javed Bari (Primary Author & Presenter)**. 2023. “Reusing Waste Plastic in Aggregates for Road Construction”. Journal of American Society of Civil Engineers (ASCE). Transportation & Development Institute (T&DI) Paper. Presented by Dr. Javed Bari at the ASCE International Conference on Airfield and Highway Pavements 2023, June 14 – 17, 2023. Austin, Texas, USA. DOI: 10.1061/9780784484906.012. pp. 125–134. USA. June 2023.
- Aseer Masnoon, Imtiaz Mehmood, **Javed Bari (Primary Author & Presenter)**. 2023. “Advanced Characterization of Common 60/70 Penetration Grade Asphalt Binders Used in Bangladesh”. Journal of American Society of Civil Engineers (ASCE). Transportation & Development Institute (T&DI) Paper. Presented by Dr. Javed Bari at the ASCE International Conference on Airfield and Highway Pavements 2023, June 14 – 17, 2023. Austin, Texas, USA.
- **Javed Bari**, Faria Tabassum, Md. M. I. Sadi, Md. H. Islam. 2020. “A Comprehensive Evaluation of the Hatirjheel Water Taxi Service of Dhaka City – the Capital of Bangladesh”. International Journal of Advanced and Multidisciplinary Engineering Science (IJAMES), January 2020, 3(1): 1-7, USA. January 2020. DOI: 10.5923/j.james.20200301.01.
- **Javed Bari**, Kazi Md Shifun Newaz, Quazi Rokaiya Haque, Md. Nawfal Ahmed, Faria Tabassum. 2019. “Development of a School Zone Road Safety Risk Rating System for Dhaka - the Capital City of Bangladesh”. International Journal of Traffic and Transportation Engineering (IJTTE), 2019, 8(3): 72-79. USA. December 2019. DOI: 10.5923/j.ijtte.20190803.03.
- John Willsie, **Javed Bari** and Rafiq Sarker. 2019. “Evaluation Report: Final Performance Evaluation of the Bangladesh Agricultural Infrastructure Development Program (BAIDP)”. USAID. June 2019.
- **Javed Bari**, S.N. Siddiquey, M. A. Hossain, K. M. S. Newaz, and M. Noshin. “Identification of Black Spots on the first 100 kilometers of the Dhaka-Sylhet Highway (National Highway #2, i.e. N2) of Bangladesh”. Proceedings of the 5th International Conference on Engineering Research, Innovation and Education (ICERIE 2019). Shahjalal University of Science and Technology, Sylhet, Bangladesh, January 2019.
- **Javed Bari**, Morshedul Haque Sunny, Sattyjit Kumar Nag, Shakhawat Hossain Tushar, Md. Touhidul Haque. 2018. “Development of Sidewalk Condition Index (SCI) of Dhanmondi R/A, Gulshan & Bashundhara R/A of Dhaka City”. International Journal of Traffic and Transportation Engineering. (IJTTE), 2018, 7(3): 53-62. USA, July 2018. DOI: 10.5923/j.ijtte.20180703.02.
- **Javed Bari** and Md. Sayeedur Rahman. “Impact Evaluation Study for the Iswardi Export Processing Zone, Phase-2”. Project Final Report submitted to Implementation Monitoring and Evaluation Division, Sher-e-Bangla Nagar, Dhaka-1207, Ministry of Planning, Government of the People’s Republic of Bangladesh. May 2018.
- Syed Waqar Haider, M. Waseem Mirza, Ashvini K. Thottempudi, **Javed Bari**, and Gilbert Y. Baladi. “Characterizing Temperature Susceptibility of Asphalt Binders Using Activation Energy for Flow”. Journal of American Society of Civil Engineers (ASCE). Transportation & Development Institute (T&DI) Paper No. 10.1061/41167(398)48, USA, March 2011.
- Syed Waqar Haider, M. Waseem Mirza, Ashvini K. Thottempudi, **Javed Bari**, and Gilbert Y. Baladi. “Effect of Test Methods on Viscosity Temperature Susceptibility Characterization of Asphalt Binders for the Mechanistic-Empirical Pavement Design Guide”. Journal of American Society of

Civil Engineers (ASCE). Transportation & Development Institute (T&DI) Paper No. 10.1061/41167(398)47, USA, March 2011.

- **Javed Bari** and M.W. Witzak. “New Predictive Models for the Viscosity and Complex Shear Modulus of Asphalt Binders for Use with the Mechanistic-Empirical Pavement Design Guide”. Transportation Research Record No. 2001, pp. 9-19. Transportation Research Board, National Research Council, Washington, DC, USA, 2007.

- **Javed Bari** and M.W. Witzak. “Development of a New Revised Version of the Witzak E* Predictive Model for Hot Mix Asphalt Mixtures.” Journal of the Association of Asphalt Paving Technologists (AAPT), Savannah, Vol. No. 75, pp. 381-423. Presented by Dr. Javed Bari at the Annual Conference of AAPT, White Bear Lake, MN, USA, 2006.

- **Javed Bari** and M.W. Witzak. “Evaluation of the Effect of Lime Modification on the Dynamic Modulus Stiffness of Hot-Mix Asphalt: Use with the New Mechanistic-Empirical Pavement Design Guide.” Transportation Research Record No. 1929, pp. 10-19. Transportation Research Board, National Research Council, Washington, DC, USA, 2005.

- Dean T. Kashiwagi, **Javed Bari**, and Bevan Sullivan. “Application of Performance Based System in the Pavement Contracting”. Associated Schools of Construction (ASC) Proceedings of the 39th Annual Conference, pp 303-314, Clemson, South Carolina, April 8-12, 2003. Nominated as ASC 2003 best paper.

RECENTLY COMPLETED / ONGOING RESEARCH PROJECTS

- Before and after road safety status of the National Highways of Bangladesh.
- Evaluation of pedestrian safety in Dhaka city.
- Feasibility Study of the Construction of 66 Upazila/Thana, District and Regional Server Station for Election Database and Election Offices for the Election Commission of Bangladesh.
- In-depth evaluation of the project of Roads and Highway Department titled: “Improvement of Joypurhat-Hichmi-Puran Aipaul-Panchbibi-Hilli (with City Link) Highway”.
- Analysis of roadway infrastructure management Using iRAP protocols to ensure road safety of critical intersections in Dhaka City.
- Railway level crossing safety status in Dhaka.
- Analysis of the bus management system of Dhaka City.
- Characterization of recycled plastic-modified asphalt for use in Bangladesh's flexible pavements in the flexible pavements of Bangladesh.
- Develop a strategy to implement Performance Grade Specifications of asphalt in Bangladesh.
- In-depth evaluation of the project of Roads and Highway Department titled: “Kishoreganj-Karimganj-Chamraghat District Highway Construction with Proper Levelling of Choyna-Jashadal-Chowddashata Bazar Link Road”.

PROFESSIONAL RESEARCH/ CONSULTANCY EXPERIENCES

2024: Team Leader for the Feasibility Study of the Construction of 66 Upazilla/Thana, District and Regional Server Station for Election Database and Election Offices for the **Election Commission** of Bangladesh. **Budget** = BDT 4753.05 million.

2024: Team Leader for the In-depth Evaluation of the “Improvement of Joypurhat-Hichmi-Puran Aipaul-Panchbibi-Hilli (with City Link) Highway” Project of the **Roads and Highways Department** on behalf of the Implementation Monitoring & Evaluation Division, Ministry of Planning, Bangladesh Government. **Budget** = BDT 2,263 million.

2022-2023: Team Leader on behalf of the **World Bank**, for the Final Performance Audit of the World Bank-funded “RTIP-II: Additional Financing” project of LGED (implemented in 18 districts of Bangladesh). **Project budget** = USD 170 million.

2023: Team Leader for the In-depth Evaluation of the “Kishoreganj-Karimganj-Chamraghat District Highway Construction with Proper Levelling of Choyna-Jashadal-Chowddashata Bazar Link Road” Project of the **Roads and Highways Department** on behalf of the Implementation Monitoring & Evaluation Division, Ministry of Planning, Bangladesh Government. **Budget** = BDT 7,313 million.

2020-2023: Principal Investigator of the NSU research grant project titled: “Characterization of Recycled Plastic-Modified Asphalt Binders for Using in Flexible Pavements of Bangladesh”. **Budget** = BDT 250,000.

2020-2023: Principal Investigator of the NSU research grant project titled: “Characterization of Common Asphalt Binders Used by the Roads and Highways Department of Bangladesh Government to Develop a Strategy to Implement the Performance Grade (PG) Specifications in Bangladesh”. **Budget** = BDT 250,000.

2019: Lead Civil Engineer for the final evaluation of the BAIDP (Bangladesh Agricultural Infrastructure Development Program) of **USAID**. **Budget** = USD 50 million.

2018: Team Leader for assessing the Socio-Economic-Environmental Impact Evaluation of the Ishwardi Export Processing Zone, Bangladesh. **Budget** = BDT 830 million.

2014 - 2017: A lead consultant of the **World Bank** to monitor the World Bank-funded “Second Rural Transport Improvement Project (RTIP-II)” of LGED (implemented in 26 districts of Bangladesh). **Project budget** = USD 417 million.

2011 - 2013: Advised/Mentored Civil Engineering students at IUBAT to accomplish their Practicum and researches. I also conducted some independent researches.

2009 - 2011: Technical Advisor of ADOT Research Project #SPR-674 “Engineering Properties of Recycled ARFC overlays”. **Budget** = USD 50,000.

2008 - 2011: Champion and Researcher of ADOT Research Project #SPR-610 “Development of AASHTO DARWin-ME Software for the MEPDG”. **Budget** = USD 50,000.

2008 - 2010: Technical Advisor of ADOT Research Project #SPR-631 “Evaluation of Warm Mix Technology for Use in Asphalt Rubber Asphalt Concrete Friction Courses”. **Budget** = USD 150,000.

2008 - 2010: Champion and Researcher of ADOT Research Project #SPR-672 “Traffic Data Input System for ADOT”. **Budget** = USD 100,000.

2007 - 2010: Champion and Technical Advisor of ADOT Research Project #SPR-606 “Calibration and Validation of MEPDG for the State of Arizona”. **Budget** = USD 300,000.

2007 - 2010: Technical Advisor of ADOT Research Project #SPR-628 “Maintenance Strategies for the State of Arizona”. **Budget** = USD 100,000.

2008 - 2011: Co-Principal Investigator of the project titled “Implementation of Superpave Binder and Asphalt Mix Specifications to Improve Pavement performance in Pakistan” under the Joint Pakistan-USA Science and Technology Cooperative Program being conducted jointly by the Michigan State University, USA and the University of Engineering and Technology, Lahore, Pakistan. **Budget** = USD 600,000.

2003 - 2004: Sole researcher of the ASU-NLA joint venture research project “Development of a Master Curve (E*) Database for Lime Modified Asphaltic Mixtures”. This project was funded by National Lime Association (NLA), USA. **Budget** = USD 50,000.

2002 - 2006: Main researcher of the ASU-ADOT joint venture research project “Performance Evaluation of Asphalt Rubber Mixtures in Arizona”. ADOT, USA funded the project. **Budget** = USD 50,000.

2002: Sole researcher of the research titled “Application of Performance Based System in the Pavement Contracting”. This independent study was conducted at ASU in association with its School of Construction.

2002: Sole researcher of the research titled “Developed a standard procedure for achieving target air void content of gyratory HMA specimens (provisional protocol)”. This independent study was conducted at ASU in conjunction with the NCHRP 9-19 Project.

2001 - 2005: Key researcher of Subtasks C4b, C4c, C4e and C5 included in Task C (Field Validation of the Simple Performance Test) of NCHRP 9-19 Project (Superpave Support and Performance Models Management). This multi-year U.S. National project funded by the National Cooperative Highway Research Program, USA. **Budget** = USD 250,000.

2001 - 2003: Key researcher of developing the AASHTO test protocol TP 62-03, titled “Determining Dynamic Modulus of Hot-Mix Asphalt Concrete Mixtures”. The research was conducted at ASU with the NCHRP 9-19 Project. **Budget** = USD 50,000.

2000 - 2006: Key researcher of projects #2, #3, #5, and #7 of ADOT’s large long-term research program #SPR-402 (Development of Performance Related Specifications for Asphalt Pavements in the State of Arizona). **Budget** = USD 200,000.

2000 - 2004: Sole researcher of the ASU-ADOT joint venture research titled “ADOT Crumb Rubber Modified Asphalt Cements Characterization Project”. ADOT, USA funded this multi-year research. **Budget** = USD 50,000.

RESEARCH INTERESTS

- Road safety;
- Traffic and crash data analysis;
- Recycling of roadway materials;
- Environmental Impact Assessment (EIA), environmental audit environmental safeguards;
- Pavement design and analysis;
- Traffic surveys and analysis;
- Highway materials characterization;
- In-depth socio-economic-environmental and engineering evaluation and feasibility studies of large infrastructure projects.

SELECTED TRAININGS TAKEN

Formally trained in the **USA** for Strategic planning, Budgeting process, Performance measures, Operational management, Management of project development process, Incident Command System, Pavement Preservation for High-Traffic-Volume Roadways, Asphalt Emulsions, and Project Reference. Also formally trained in **Bangladesh** as Program Evaluator for IEB/ BAETES’s Accreditation of Engineering Programs following the Washington Accord’s Outcome-based Education (OBE) Accreditation protocol, World Banks’s Road Safety training, Performance-based Maintenance Contract (PBMC), Infrastructure maintenance, Environmental Impact Assessment (EIA) Practitioner’s Training, Environmental Law and Environmental Audit.

COMPUTER SKILLS

Highly proficient in using the following computer applications:

- Star Rating for Road Safety using VIDA software.
- Accident data analysis using MAAP software.

- Project Appraisal: HDM-4.
 - Project Management: Microsoft Project, Primavera and Suretrack.
 - Pavement Design: AASHTOWare (Mechanistic-Empirical Pavement Design Guide Software).
 - Highway Geometric Design: InRoads.
 - Pavement Management: ADOT PMS software
 - Statistical Analysis: Statistica, Matlab, Minitab and Design Expert.
 - Engineering Estimates: HeavyBid Express.
 - Programming: FORTRAN and Visual Basic.
 - MS Office: MS Word, PowerPoint, Access and Excel.
 - CAD: MicroStation and AutoCAD.
 - GIS: ArcGIS Pro.
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SOCIAL WORKS

- Co-Founder/ Founder President of “Shikor Bangla School”, Arizona, USA. Established in 2003.
 - Co-Founder/ Founder General Secretary of “Bangladesh Theater of Arizona” – a USA IRS 501(c)(3)-enlisted non-profit charitable organization of the USA. Established in 1999.
 - Former Secretary of “Young Writers Forum” – a young writers’ forum. Established in 1990.
 - Co-Founder and Founder President of “Dhaka Science Club”. Established in 1985.
 - Former General Secretary of “Onirban” – a youth organization. Established in 1984.
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REFERENCES

Dr. Kamil Kaloush

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Arizona State University (ASU), Tempe, Arizona 85287, USA
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Reference type: Professional (Ex-colleague at ASU and alumnus of same university - ASU)

Dr. Mohammad Nazmul Islam

Professor, Department of Civil and Environmental Engineering
North South University, Dhaka, Bangladesh
Phone: +88-01715117113 (Mobile),
Reference type: Professional (Colleague at NSU and alumnus of same university - BUET)

Dr. Md. Abdullah Al Mamun

Additional Chief Engineer (Technical Services Wing)
Roads and Highways Department (RHD), Dhaka, Bangladesh
Phone: +88-01553759503 (Mobile), E-mail: mamun89@gmail.com
Reference type: Professional (Ex-colleague at RHD and alumnus of same university - BUET)

Professor Dr. Md. Monirul Islam

Dean, College of Engineering and Technology and Chair, Department of Civil Engineering
IUBAT-International University of Business Agriculture and Technology, Dhaka, Bangladesh
Phone: +88-01716583558 (Mobile), E-mail: mmislam@iubat.edu
Reference type: Professional (Ex-colleague at IUBAT and alumnus of same university - BUET)
