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EDUCATION

Degree	Institution	Field	Dates
Doctor of Philosophy (Ph.D.)	Texas A&M University College Station, Texas, U.S.	Civil Engineering - Infrastructure Management - Pavements and Materials	January 2003 – May 2007
Master in Science (MS)	Texas A&M University College Station, Texas, U.S.	Civil Engineering - Pavement Management - Pavement Evaluation	August 1997 – July 1999
Civil Engineer	Universidad Nacional de Ingeniería, Lima - Perú	Civil Engineering - Structural Analysis and Design - Seismic Analysis	January 1990 – December 1991
Bachelor in Civil Engineering	Universidad Nacional de Ingeniería, Lima - Perú	Civil Engineering - Structural Analysis and Design - Materials	January 1982 – December 1989

EXPERIENCEFull-Time Academic Experience

Institution	Title	Field	Dates
University of Texas at El Paso (UTEP) Texas, U.S.	Associate Professor	Civil Engineering - Infrastructure - Pavements and Materials	August 2008 - present
Texas Transportation Institute (TTI) at Texas A&M College Station, Texas, U.S.	Associate Researcher	Civil Engineering - Infrastructure Management - Pavements and Materials	January 2005 – July 2008

Part-Time Academic Experience

Institution	Title	Field	Dates
Universidad Ricardo Palma	Visiting Professor	Civil Engineering - Pavement Design	December 2015 June 2015 August 2013
Universidad EAFIT Medellin - Colombia	Visiting Professor	Civil Engineering Master in Engineering - Pavement Analysis and Design	April 2016 April 2015 April 2014 April 2013 May 2012
Universidad de Piura Lima - Perú	Visiting Professor	Civil Engineering Master in Transportation - Pavement Analysis and Design / Project Evaluation	March 2014 March 2012 July 2010 August 2009
Universidad Nacional de Ingeniería Lima - Perú	Lecturer	Civil Engineering Master Program - Advanced Pavement Analysis and Design	January 2000 - December 2002
Texas Transportation Institute (TTI) Texas A&M. College Station, Texas, U.S.	Research Assistant	Civil Engineering - Infrastructure - Pavements and Materials	August 1997 – December 1999
Peru-Japan Seismic Investigation and Mitigation Center (CISMID) Lima, Perú	Research Engineer	Civil Engineering - Structural Analysis - Seismic Analysis	January 1990 – December 1991
Universidad Nacional de Ingeniería Lima - Perú	Teaching Assistant	Civil Engineering - Structural Analysis and Design	January 1990 – December 1991

Non-Academic Experience

Place of Employment	Title	Dates
Inter-American Development Bank	External Consultant	May 2004 – June 2008
CESEL, S.A. Lima – Perú	Head of the Road Design Department and Quality Assurance/ Quality Control Division	January 2000 - December 2002
Ministry of Public Works Lima – Perú	External Consultant	March 2000 – August 2002
Resource International, Columbus, Ohio, U.S.	Pavement and Materials Engineer	August 1999 - December 1999
CESEL, S.A. Lima – Perú	Pavement and Materials Engineer	June 1993 – July 1997

PUBLICATIONS

Journal Peer-Reviewed Papers (*italicized names correspond to students at UTEP*)

Published or accepted for publication:

1. Chang, C. and *D. Saenz, S., and Z. Li.* “A Hybrid Modelling Approach for Quantifying Maintenance and Rehabilitation Treatment Effectiveness of Asphalt”. 2016 Transportation Research Board Meeting. Washington D.C., U.S. Accepted for publication in February 2016.
2. Chang, C., *O. González,* and P. Krugler. “Lessons Learned about Successful Flexible Pavements. CRC Press, Balkema, Taylor & Francis Group, June 2015.
3. Chang, C., *O. González,* and A. Wimsatt. “Why and When to Consider Flexible and Rigid Pavement Alternate Designs in a Bidding Process”. CRC Press, Balkema, Taylor & Francis Group, June 2015.
4. *Al-Zoubi, M., C. Chang-Albitres,* S. Nazarian, and V. Kreinovich. “A Systematic Approach to Populate Missing Performance Data in Pavement Management Systems”. American Society of Civil Engineering (ASCE), *Journal of Infrastructure Systems.* Approved for publication in December 2014.
5. Chang, C., *E. Montes,* H. Taboada, and J. Espiritu. “Allocating Transportation Funds using Fair Division Methods”. American Society of Civil Engineering (ASCE), *Journal of Infrastructure Systems.* DOI:10.1061/(ASCE)IS.1943-555X.0000217, April 2014.
6. Chang, C., and *E. Montes.* “An Optimization Approach Applied to Fair Division Transportation Funding Allocation Models”. *Journal of the Transportation Research Forum,* Vol. 53, No. 1 (Spring 2014), pp. 101-118, U.S.A., April 2014.
7. Chang, C., and *A. Rodriguez.* "ADAPT Home, Design of a Sustainable, Environmental-Friendly, and Affordable House". Proyecta, Perú. January 2014.
8. *Gallegos, A., C. Chang-Albitres,* and S. Nazarian. “A Hybrid Technique for Calibrating Network Performance Models of Continuously Reinforced Concrete Pavements”. American Society of Civil Engineering (ASCE), *Journal of Transportation Engineering.* DOI:10.1061/(ASCE)TE.1943-5436.0000579, December 2013.
9. Chang-Albitres, C., “Summary and Comments about the Soils and Pavement Design Peruvian Manual”. *Journal Construyendo Caminos,* Perú, Year 2, Vol. 8, September-October, 2013.
10. Chang-Albitres, C., “Reflections for the Design and Rehabilitation of Concrete Pavements in Highway Projects”. *Journal Construyendo Caminos,* Perú, Year 2, Vol. 7, July-August, 2013.

11. Chang-Albitres, C., R. Feldman., P. Krugler, and *I. Ibarra*. “A Simulation Model to Prioritize Right-of-Way Acquisitions”. American Society of Civil Engineering (ASCE), *Journal of Infrastructure Systems*. ISSN-1076-0342, U.S.A., December 2012.
12. Chang-Albitres, C., D. Salomon, and *I. Ibarra*. “The State of the Art in the Implementation of International Road Management Systems”. *Journal of Carreteras*. Asociación Española de la Carretera. Spain In Press. Volume Number 189, May-June 2013.
13. Chang-Albitres, C., D. Salomon, and *I. Ibarra*. “The State of the Art in International Road Management System Practices”. *Journal of Pavement Preservation*, Winter Edition, USA. November 2012.
14. Chang-Albitres, C., P. Krugler, *I. Ibarra*, and *E. Montes*. “A Dynamic Programming Optimization Approach for Budget Allocation to Early Right-of-Way Acquisitions”. *Journal of the Transportation Research Forum*, Vol. 51, No. 3 (Fall 2012), pp. 55-66, U.S.A., November 2012.
15. Huaman, N. and C. Chang-Albitres. “Permanent Deformation in Peruvian Asphalt Pavements”. Technical *Journal of Carreteras*, Asociación Española de la Carretera. Spain. Season 4, Vol. 183, May-June 2012.
16. Chang-Albitres, C. and *A. Arias*. “Development and Application of Pre-Cast Concrete for Pavements”. *Journal Construyendo Caminos*. Year 2, Vol. 4, October 2012. Perú.
17. *Ramirez, R.* and C. Chang-Albitres. “A Stochastic Proposal for Metropolitan Transportation Commission Pavement Management System in the San Francisco Bay Area”. *Academia Journals* (ISSN 1946-5351), Mexico, April 2012.
18. Chang-Albitres, C., R. Smith, and O. Pendleton. “Comparison of Automated Pavement Distress Data Collection Procedures for Local Agencies in the San Francisco Bay Area”. *Transportation Research Record, Journal of the Transportation Research Board* 1990, 119-126. Transportation Research Board. Washington D.C., U.S., January 2007.

Papers submitted for review:

1. Chang, C., R. Ramirez. “Development of Probability-Based Pavement Performance Curves for Pavement Management Systems”. 8th International Conference on Maintenance and Rehabilitation of Pavements (MAIREPAV8), Singapore, July 2016. (Under review)
2. Chang, C., and *M. Vavrova*. “Vulnerable User Road Safety Enhancements for Transportation Asset Management”. ASCE International Conference on Transportation & Development, Houston, June 2016. Submitted in October 2015. (Under review)
3. *Vavrova, M.*, and C. Chang. “A Framework to Analyze the Feasibility of Vehicle Miles Travelled Fees to Finance a Sustainable Transportation System”. *Journal of the Transportation Research Forum*. Submitted in September 2015. (Under review)

Papers in progress:

1. Ramirez, R., C. Chang, and C. Ferregut. "A Probabilistic Performance-Based Multi-Scenario Approach for Pavement Management Decisions". (In Progress)
2. Chang, C., L. Quintana, J. Makahaube, and R. Aldouri. "Integrating Fiber Optics Decision Support System into Asset Management Practices". (In Progress).

Conference Proceedings (Peer Reviewed, *italicized names correspond to students at UTEP*)

1. Chang, C. , O. González, L. Lorslof.. "Continue Monitoring of the Functional Pavement Condition Using Smart Mobile Devices". XVIII Ibero-Latin-American Asphalt Congress. Argentina, November, 2015.
2. Chang, C., S. Mejia, J. Valencia, W. Mena, C. Jaña. "Implementation of the AASHTO 2008 Mechanistic-Empirical Pavement Design Guide in Colombia and Perú". XVIII Ibero-Latin-American Asphalt Congress. Argentina, November, 2015.
3. Mancero, C., and C. Chang. "Lessons Learned Using Rubberized Asphalt to Improve Pavement Performance". XVIII Ibero-Latin-American Asphalt Congress. Argentina, November, 2015.
4. Chang, C., M. Vavrova, and R. Smith. "A Multi-Objective Asset Management Approach to Evaluate Maintenance Strategies for Funding Allocation". Ninth International Conference on Managing Pavement Assets. Blacksburg, Virginia, June, 2015.
5. Chang, C., and *R. Ramirez.* "Development of Probability-Based Pavement Performance Curves for Pavement Management Systems". Transportation Research Record 2015. Washington D.C., U.S., January 2015.
6. *Vavrova, M.* and C. Chang. "A Framework to Integrate On-Street Bikeway Maintenance into Pavement Management Practices". Transportation Research Record 2015. Washington D.C., U.S. January 2015.
7. Ferregut, C., H. Taboada, J. Espiritu, C. Chang, R. Cheu, N. Vargas-Hernandez, S. Vegas, E. Sanchez, G. Chang, V. Quevedo and D. Marcelo. "Developing global and Regional Sustainability Engineering Skills through a Successful Study aboard Program" Engineering Leaders Conference on Engineering Education. Doha, Qatar, November, 2014.
8. *Vavrova, M.* and C. Chang. "Environmental-Related Performance Measures Framework for Sustainable Asset Management Practices." ICTI 2014 International Conference on Transportation Infrastructure. Italy, April, 2014.
9. *Vavrova, M.* and C. Chang. "Quality Function Deployment Matrix for Sustainable Performance Measures in Asset Management." 17th International Road Federation (IRF) World Meeting. Kingdom of Saudi Arabia, November, 2013.

10. Chang-Albitres, C. and *E. Montes*. “Premature Pavement Failure due to Extraordinary Loads”. XVII Ibero-Latin-American Asphalt Congress. Guatemala, November, 2013.
11. Chang-Albitres, C., *D. Saenz*, *W. Mertz*, and *F. Vásquez*. “Pavement Roughness Quality Control using Inertial Profilers”. XVII Ibero-Latin-American Asphalt Congress. Guatemala, November, 2013.
12. Chang-Albitres, C., *M. Bustos*, *R. Delgadillo*, and *L. Loria*. “Applicability of the Mechanistic-Empirical Pavement Design Method AASHTO 2008 in Latinamerica”. XVII Ibero-Latin-American Asphalt Congress. Guatemala, November, 2013.
13. Chang-Albitres, C. and *E. Montes*. “Fair Division Methods for Funding Allocation”. 9th National Conference in Transportation Asset Management. California, U.S., April, 2012.
14. *Ramirez, R.* and C. Chang-Albitres. “A Stochastic Decision-Making Approach for the Metropolitan Transportation Commission Pavement Management System”. 9th National Conference in Transportation Asset Management. California, U.S., April, 2012.
15. Chang-Albitres, C., *L. Quintana*, and *R. Aldouri.*, “Development of a GIS Fiber Optics Asset Management System”. 91st Annual Meeting of the Transportation Research Board. Washington D.C, U.S., January, 2012.
16. *Smith, R.*, *S. Tan, S.*, and C. Chang-Albitres. “Distress Data Collection Quality Management in a Regional Agency”. 8th International Conference on Managing Pavement Assets (ICMPA). Santiago de Chile, Chile, November 2011.
17. Chang-Albitres, C. “A Quest for Successful Pavements”. 2nd International Road Federation (IRF) Middle East Regional Congress. International Road Federation. Abu Dhabi, United Arab Emirates, November 2010.
18. Chang-Albitres, C. “New Mechanistic-Empirical Pavement Design Guide AASHTO 2008”. 3rd International Road Federation (IRF) Latin American Regional Congress. International Road Federation. Bogota, Colombia, November 2010.
19. Chang-Albitres, C. “State of the Art in Pavement Management Systems”. 3rd International Road Federation (IRF) Latin American Regional Congress. International Road Federation. Bogota, Colombia, November 2010.
20. *Camacho, G.*, *N. Gharaibeh*, C. Chang-Albitres, and *R. Aldouri.* “A GIS Technique for Managing Dynamic Infrastructure Data”. 89th Annual Meeting of the Transportation Research Board. Washington D.C, U.S., January, 2010.
21. Chang-Albitres, C., *R. Smith*, and *R. Ramirez*. “A Multiobjective Strategic Pavement Management Approach”. XV Ibero-Latin-American Asphalt Congress. Portugal, November, 2009.

22. Valdovinos, M., A. Villalba, N. Figueredo, A. Epps Martin, and C. Chang-Albitres, “Experimental InterFacial Shear Strength Test and its Application of Pavements in the Paraguayan Chaco Region”. XV Ibero-Latin-American Asphalt Congress. Portugal, November, 2009.
23. Chang-Albitres, C., P. Krugler, and A. Eltahan, “A Quest for Successful Pavements in Texas”. T&DI Pavement Conference, American Society of Civil Engineering. Seattle, U.S., October, 2008.
24. Chang-Albitres, C. and R. Smith. “Leveraging Knowledge to Support Pavement Management Strategic Decisions”. Seventh International Conference on Managing Pavement Assets. Calgary, Canada, June, 2008.
25. Chang-Albitres, C. and R. Smith. “Tools to Support Pavement Management Investment Decisions for Achieving Multiple Target Objectives in a Local Agency”. Seventh International Conference on Managing Pavement Assets. Calgary, Canada, June, 2008.
26. Chang-Albitres, C. and R. Smith. “A Multiobjective Strategic Pavement Management Approach for Managing Pavement Assets”. First International Conference on Transport Infrastructure. Beijing, China, April, 2008.
27. Chang-Albitres, C., P. Krugler, and A. Eltahan. “Development of a Knowledge Management System for TxDOT Pavement Related Corporate Knowledge”. 85th Annual Meeting of the Transportation Research Board. Washington D.C, U.S., January, 2006.
28. Chang-Albitres, C., J. Button, and J. Dioverti. “Strategic Planning for the Construction of Long-Lasting Pavements in El Chaco in the Republic of Paraguay”. XIII Ibero-Latin-American Asphalt Congress. Costa Rica, November, 2005.
29. Chang-Albitres, C. and T. Freeman. “Implementation of a Mechanistic Pavement Design Guide NCHRP 1-37A in Texas”. XIII Ibero-Latin-American Asphalt Congress. Costa Rica, November, 2005.
30. Chang-Albitres, C., P. Krugler, and A. Eltahan. “Development of a Knowledge Management System for TxDOT Pavement Related Corporate Knowledge”. XIII Ibero-Latin-American Asphalt Congress. Costa Rica, November, 2005.
31. Chang-Albitres, C., B. Stockton, D. Smith, and C. Smith. “Development of a Toll Viability Screening Tool”. 84th Annual Meeting of the Transportation Research Board. Washington D.C., U.S., January, 2005.
32. Chang-Albitres, C. and R. Smith. “The Effects of Pavement Maintenance and Rehabilitation Strategies on the Value of Roadway Infrastructure”. Sixth International Conference on Managing Pavements. Brisbane, Australia, October, 2004.

33. Chang-Abitres, C. and O. Huaya. "Evaluation of Rutting Risk Potential of Asphalt Mixes Using MARC Equipment". VII Asphalt National Congress. Lima, Perú, November, 2004.
34. Chang-Abitres, C. "Characterization of Materials and Performance Models for Pavement Design", AASHTO 2002, VI Asphalt National Congress, Lima, Perú, November, 2003.
35. Chang-Albitres, C. "Methodologies to Assess Roughness in Pavements and its Applicability for Calibrating Measuring Devices", V Asphalt National Congress, Lima, Peru, November, 2002.
36. Chang-Albitres, C. and R. Smith, "The Role of Pavement Management Systems for Preventive Maintenance and Pavement Preservation", XI Ibero Latin American Asphalt Congress, Lima, Perú, November, 2001.
37. Chang-Albitres, C., M. Campos, and D. Vasquez. "Methodology for Quality Control for Hot Asphalt Mix Pavement Construction". XI Ibero Latin American Asphalt Congress. Lima, Perú, November, 2001.
38. Chang-Albitres, C. and R. Torres. "Applicability of Non Destructive Testing for Quality Control of Flexible Pavement". XI Ibero Latin American Asphalt Congress. Lima, Perú, November, 2001.
39. Chang-Albitres, C. and J. Melendez. "Applicability of HDM-III Model for Highway Project Evaluation". 13° National Engineering Congress. Lima, Peru, September, 2001.
40. Chang-Albitres, C. and D. Vasquez. "A Comparative Analysis to Study the Relationship between the California Bearing Ratio (CBR) and Soil Classification for Pavement Design". 13° National Engineering Congress. Lima, Peru, September, 2001.
41. C. Chang-Albitres. "Deflectometric Evaluation, Analysis and Correlation of Results for Different Equipments". IV Asphalt National Congress, Lima, Peru, November, 2000.
42. Smith, R. and C. Chang -Albitres. "Pavement Management, Preventive Maintenance & Preservation". Annual Meeting of the Transportation Research Board. Washington D.C., U.S., January, 2000.
43. Chang-Albitres, C. and R. Smith. "The Effects of Pavement Maintenance and Rehabilitation Policies on the Value of Roadway Infrastructure". X Ibero Latin American Asphalt Congress. Madrid, Spain, November, 1999.
44. Chang-Albitres, C. and M. Bruner. "Applicability of Geographic Information Systems for Pavement Management Systems: A practical case". X Ibero Latin American Asphalt Congress. Madrid, Spain, November, 1999.
45. Chang-Albitres, C., "Pavement Management and Highway Maintenance: An Integrated Approach". First Asphalt National Congress Lima. Perú, November, 1997.

46. Chang-Albitres, C. “Deflectometric Evaluation, Analysis and Correlation of Results for Different Equipments”. IX Ibero Latin American Asphalt Congress. Asunción, Paraguay, November, 1997.
47. Chang-Albitres, C. “New Specifications SUPERPAVE for Asphalt Mix Design and its Possible Implementation” in Perú. XI National Engineering Congress. Lima, Perú, September, 1997.
48. Chang-Albitres, C. “Highway Rehabilitation and Asphalt Overlay Design Methods”. XXIX Asphalt Meeting. Buenos Aires, Argentina, November, 1996.
49. Chang-Albitres, C. “Improvement of the Serviceability Index in Road Rehabilitation”. VIII Ibero Latin American Asphalt Congress. La Paz, Bolivia, November 1995.
50. Chang-Albitres, C., R. Delgado, and E. Castillo. “Technological Advance and Resource Optimization in Road Projects”. X National Engineering Congress. Lima, Peru, 1994.

Books

1. Chang-Albitres, C. *Pavements: An Integrated Approach*. Construction Management Institute and Texas Transportation Institute. Lima, Perú 2012.
2. Chang-Albitres, C. *Mechanistic-Empirical Pavement Design Guide: AASHTO 2008*. Editor of the Spanish Version. Construction Management Institute. Lima, Perú, December 2011.
3. Chang-Albitres, C. *Urban Concrete Pavements*. ASOCEM. Lima, Perú, December 2011.
4. Chang-Albitres, C. *Guidelines for Locating, Selecting, and Designing Traffic Barriers*. ASOCEM. Lima, Perú, March 2010.
5. Chang-Albitres, C. *Guidelines for the Development of Equivalent Pavement Designs: Rigid and Flexible in the Bidding Process*. ASOCEM. Lima, Perú, August 2009.
6. Smith, R., T. Freeman, and C. Chang-Albitres. *Pavement Management*. Federal Highway Administration, Construction Management Institute, and Texas Transportation Institute. Lima, Perú, 2006.
7. Chang-Albitres, C. *Pavements: A Vision into the Future*. Construction Management Institute and Texas Transportation Institute. Lima, Perú, 2005.

Reports (*First author of italicized title items, italicized names correspond to students*)

1. Chang, C., M. Vavrova, and S. Tan. “A Multi-Objective Sustainable Model for Transportation Asset Management Practices”. Final Report. Center for Transportation Infrastructure Systems. University of Texas at El Paso. January 2016 (submitted to Tier 1 University Transportation Center Consortium led by Rutgers University).

2. Chang, C., S. Nazarian, I. Abdallah, R. Smith, *M. Vavrova*, M. Yapp, J. Puccinelli, T. Punnackal, and W. Robert. “*Consequences of Delayed Maintenance of Highway Assets*”. Interim Report. NCHRP Project 14-20A. Center for Transportation Infrastructure Systems. University of Texas at El Paso. December 2014. (submitted to National Cooperative Highway Research Program).
3. *Varela E.*, C. Chang, and R. Smith. “Dynamic Adjustment of PCI Family Curves Based on Field Inspection History. Technical Report. University of Texas at El Paso. Technical Report. December 2014 (submitted to the Metropolitan Transportation Commission in California).
4. *Vavrova, M.* and C. Chang. “StreetSaver Software Testing Sign Needs Assessment”. Technical Report. University of Texas at El Paso. October 2014 (submitted to the Metropolitan Transportation Commission in California).
5. *Rodriguez, A.* and C. Chang. “Weathering and Raveling PCI and Budget Needs Comparison”. Technical Report. University of Texas at El Paso. September 2014 (submitted to the Metropolitan Transportation Commission in California).
6. Chang, C., *D. Saenz*, S. Nazarian, I. Abdallah, A. Wimsatt, T. Freeman, and E. Fernando. “*TxDOT Guidelines to Assign PMIS Treatment Levels*”. Research Product 0-6373-P1. Center for Transportation Infrastructure Systems. University of Texas at El Paso. June 2014. (submitted to TxDOT).
7. *Benitez, H.* and C. Chang. “PCI Increase and Life Extension Due to Surface Treatments, Summary Results from Survey 1”. Technical Report. University of Texas at El Paso. June 2014 (submitted to the Metropolitan Transportation Commission in California).
8. C. Chang., Smith. R., and M. Vavrova. “Conceptual Description of PCI Target-Driven Scenario for MTC StreetSaver PMS”. Technical Report. University of Texas at El Paso. December 2013 (submitted to the Metropolitan Transportation Commission in California).
9. Chang, C., *D. Saenz*, S. Nazarian, I. Abdallah, A. Wimsatt, T. Freeman, and E. Fernando. “*Evaluate the Improvement in Pavement Ride, Distress and Condition Based on Different Treatment Types*”. Final Report 0-6373-3. Center for Transportation Infrastructure Systems. University of Texas at El Paso. August 2013. (submitted to TxDOT).
10. Chang, C., H. Taboada, J. Espiritu, T. Fullerton, *E. Montes*, and A. Walke. “*Using Fair Division Methods for Allocating Transportation Funds*”. Center for Transportation Infrastructure Systems. University of Texas at El Paso. Final Report 0-6727. August 2013. (submitted to TxDOT).
11. Chang, C. and Vavrova M. “Testing Deferred Maintenance Results for StreetSaver Target Driven and Budget Scenario Analysis” University of Texas at El Paso. June 2013 (submitted to the Metropolitan Transportation Commission in California).

12. Saenz D. and C. Chang-Albitres. “Evaluation of Profilemeter Chasqui”. Technical Report. University of Texas at El Paso. December 2012 (submitted to HOB Consultants).
13. Ramirez, R., M. Vavrova, and C. Chang-Albitres. “Performance Curves for Mill and Fill, San Francisco AC/PCC Arterial, Collector, Residential”. Technical Report. University of Texas at El Paso. November 2012 (submitted to the Metropolitan Transportation Commission in California).
14. Gharaibeh, N., T. Freeman, S. Saliminejad, C. Chang-Albitres, J. Weisman, A. Weisman, A., A. Wimsatt, and C. Gurganus. “Evaluation and Development of Pavement Scores, Performance Models and Needs Estimates for the TxDOT Pavement Management Information System”. Final Report 0-6383-3. Texas Transportation Institute. February 2012. (submitted to TxDOT).
15. Chang-Albitres, C. and R. Ramirez. “*Guidance on Pavement Management System Procedures*”. Final Report. University of Texas at El Paso. December 2011 (submitted to Nichols Consulting Engineers, Chtd.).
16. Quintana, L., M. Light, C. Chang-Albitres, C., and R. Aldouri. “GIS Fiber Optic Management System (GFOAMS)”. Final Report, University of Texas at El Paso. June 2011 (submitted to the City of El Paso).
17. Chang-Albitres, C., L. Quintana, L., R. Aldouri, and M. Light. “*Development of a GIS Fiber Optics Asset Management System (GFOAMS)*”. 3rd Work Progress Report. University of Texas at El Paso. April 2011 (submitted to the City of El Paso).
18. Krugler, P., C. Chang-Albitres, R. Feldman, S. Butenko, D. Kang, and R. Seyedshohadaie. “Implementation of TAMSIM and EROW Right-of-Way Acquisition Decision-Support Tools”. Report 5-5534-01-1. Texas Transportation Institute. December 2010 (submitted to TxDOT).
19. Chang-Albitres, C. and R. Ramirez. “*Guidance on Pavement Management System Procedures*”. 2nd Work Progress Report. University of Texas at El Paso. December 2010 (submitted to Nichols Consulting Engineers, Chtd.).
20. Chang-Albitres, C., L. Quintana, R. Aldouri, and M. Light. “*Development of a GIS Fiber Optics Asset Management System (GFOAMS)*”. 2nd Work Progress Report. University of Texas at El Paso. December 2010 (submitted to the City of El Paso).
21. Ibarra, I. and C. Chang-Albitres “Central Depository of Documents”. Technical Report. University of Texas at El Paso. November 2010 (submitted to the Metropolitan Transportation Commission in California).
22. Chang-Albitres C., A. Gallegos, A., M Al-Zoubi, M., and A. Ramirez. “*Comparison of District Priority Rankings and Repair Needs to PMIS Results*”. Technical Memorandum. University of Texas at El Paso. November 2010 (submitted to TxDOT).

23. Chang-Albitres, C., Quintana, L., Aldouri, R., and M. Light. “*Development of a GIS Fiber Optics Asset Management System (GFOAMS)*”. 1st Work Progress Report. University of Texas at El Paso. August 2010 (submitted to the City of El Paso).
24. Quintana, L., C. Chang-Albitres, R. Aldouri, and S. Hernandez. “El Paso Regional Ports of Entry Operations Plan Infrastructure Profile: Inventory Map Report”. Center for Transportation Infrastructure Systems. University of Texas at El Paso. October 2010 (submitted to TxDOT).
25. Gallegos A., C. Chang-Albitres, S. Nazarian, and I. Abdallah. “Continuous Reinforced Concrete Pavement Performance Models”. Technical Memorandum. University of Texas at El Paso. October 2010 (submitted to TxDOT).
26. Ramirez, R. and C. Chang-Albitres. “StreetSaver Software Testing PCI Calculation with ASTM Distresses”. Technical Report. University of Texas at El Paso. September 2010 (submitted to Nichols Consulting Engineers, Chtd).
27. Chang-Albitres, C. and R. Ramirez. “*Guidance on Pavement Management System Procedures*”. 1st Work Progress Report. University of Texas at El Paso. August 2010 (submitted to the Metropolitan Transportation Commission in California).
28. Ramirez, R. and C. Chang-Albitres. “StreetSaver Software Testing Review of Updates for the PCI Driven Scenarios”. Technical Report. University of Texas at El Paso. July 2010 (submitted to the Metropolitan Transportation Commission in California).
29. Krugler, P., C. Chang-Albitres, R. Feldman, S. Butenko, D. Kang, and R. Seyedshohadaie. “Development of Decision-Making Support Tools for Early Right of Way Acquisitions”. Research Report 0-5534-2. Texas Transportation Institute. January 2010 (submitted to TxDOT).
30. Chang-Albitres, C. and G. Wazalwar. “*Technical Report: Findings from Testing StreetSaver*”. Research Report, December 2009 (submitted to the Metropolitan Transportation Commission in California).
31. Chang-Albitres, C. and R. Smith. “*Conceptual Description of PCI Condition-Driven Scenario for MTC StreetSaver PMP Software*”. Research Report. Texas A&M Research Foundation, October 2009 (submitted to the Metropolitan Transportation Commission in California).
32. Wimsatt, A., C. Chang-Albitres, P. Krugler, P., T. Scullion, T. Freeman, and M. Valdovinos. “Considerations for Rigid vs. Flexible Pavement Designs when Allowed as Alternate Bids”. Research Report 0-6085-1. Texas Transportation Institute. August 2009 (submitted to TxDOT).

33. Krugler, P., C. Estakhri, C. Chang-Albitres, and C. Sasser. "Synthesis Study on Transverse Variable Asphalt Applications Rates for Seal Coats". Research Report 0-5833-1. Texas Transportation Institute. July 2009 (submitted to TxDOT).
34. Camacho, G., G. Wazalwar, N. Gharaibeh, and C. Chang-Albitres. "El Paso's GIS for Traffic Signals and Fiber Optic Infrastructure Management System (IMS): A Brief Guide for Getting Started". Research Report. Center for Transportation Infrastructure Systems. University of Texas at El Paso. June 2009 (submitted to the City of El Paso).
35. Camacho, G., G. Wazalwar, N. Gharaibeh, N., and C. Chang-Albitres. "El Paso's GIS for Storm Water Drainage Infrastructure System: A Brief Guide for Getting Started". Research Report. Center for Transportation Infrastructure Systems. University of Texas at El Paso. December 2008 (submitted to the City of El Paso).
36. Krugler, P., C. Chang-Albitres, T. Scullion., and A. Chowdhury. "Analysis of Successful Flexible Pavement Sections in Texas – Including Development of a Web site and Database". Research Report 0-5472-1. Texas Transportation Institute. September 2008 (submitted to TxDOT).
37. Chang-Albitres, C., J. Button, C. Estakhri, T. Freeman, D. Little, D., L. Lugo, A. Villalba, N. Figueredo, and M. Valdovinos. "*Development and Implementation of Technical Specifications and Construction Guidelines for Long-Lasting Pavements*". Research Report 402571-F. Texas Transportation Institute, May 2008 (submitted to the Inter-American Bank).
38. Krugler, P., C. Chang-Albitres, K. Pickett, R. Smith, H. Hicks, R. Feldman, S. Butenko., and D. Kang. "Asset Management Literature Review and Potential Applications of Simulation, Optimization, and Decision Analysis Techniques for Right-of-Way and Transportation Planning and Programming". Report 0-5534-1. Texas Transportation Institute. April 2007 (submitted to TxDOT).
39. Krugler, P. and C. Chang-Albitres. "Development of Content for a Flexible Pavement Forensics Knowledge Management System". Research Report 0-4505-2. Texas Transportation Institute. October 2006 (submitted to TxDOT).
40. Krugler, P., C. Chang-Albitres, and R. Robideau. "Development of a Rigid Pavement Forensics Knowledge Management System to Retain TxDOT Corporate Knowledge". Research Report 0-4505-1. Texas Transportation Institute. September 2005 (submitted to TxDOT).
41. Chang-Albitres, C. and P. Krugler. "*A White Paper Summary of Knowledge Management Information Gathered from Literature, Websites, and State Departments of Transportation*". Research Product 0-4505-P. Texas Transportation Institute. November 2004 (submitted to TxDOT).

42. Stockton, W., D. Smith, C. Smith, and C. Chang-Albitres. "Estimating Revenues Using a Toll Viability Screening Tool". Research Report 0-4726-1. Texas Transportation Institute. October 2004 (submitted to TxDOT).

Presentations and Workshops (*conference keynote speaker, instructor of italicized workshops*)

1. "Airport Pavement Evaluation and Management", Workshop, Peruvian Board of Engineers, Lima, Perú. March 4 - 5, 2016.
2. "A Hybrid Modelling Approach for Quantifying Maintenance and Rehabilitation Treatment Effectiveness of Asphalt". 2016 Transportation Research Board Meeting. Washington D.C. January, 13, 2016
3. "Advanced Structural Pavement Design", Workshop. Universidad Ricardo Palma. Lima, Perú. November 28 - 29, 2015.
4. "Continue Monitoring of the Functional Pavement Condition Using Smart Mobile Devices". XVIII Ibero-Latin-American Asphalt Congress. Argentina, November, 2015.
5. "Implementation of the AASHTO 2008 Mechanistic-Empirical Pavement Design Guide in Colombia and Perú". XVIII Ibero-Latin-American Asphalt Congress. Argentina, November, 2015.
6. "Lessons Learned Using Rubberized Asphalt to Improve Pavement Performance". XVIII Ibero-Latin-American Asphalt Congress. Argentina, November, 2015.
7. "Design of Flexible Pavements using the Mechanistic-Empirical Pavement Design Method AASHTO 2008". Workshop. XXIII Annual Meeting National, National Association of Independent Labs (ANALISEC), Tabasco, México, October 07, 2015.
8. "*Pavement Design Using the MTC Peruvian Manual*". Workshop. Construction Management Institute, Lima, Perú, Huancayo, August 28-29, 2015.
9. "*Road Maintenance and Basic Solutions for Low-Volume Roads*". Workshop. Construction Management Institute, Lima, Perú, Huancayo, August 27, 2015.
10. "Mechanistic-Empirical Pavement Design Method AASHTO 2008". Workshop. Construction Management Institute, Lima, Perú, August 24-25, 2015.
11. "*Routine Maintenance of Highways*". Workshop. XVI International Congress of Highway Infrastructure. Construction Management Institute. Lima, Perú, August 21st, 2015.
12. "*Basic Solutions for Low-Volume Roads*". Workshop. XVI International Congress of Highway Infrastructure. Construction Management Institute. Lima, Perú, August 21st, 2015.

13. *"Pavement Design Using the MTC Peruvian Manual"*. Workshop. Construction Management Institute, Lima, Perú, Lima, July 3-4, 2015.
14. "Advanced Structural Pavement Design", Workshop. Universidad Ricardo Palma. Lima, Perú. June 27 - 28, 2015.
15. "Infrastructure Management: A Sustainable Approach". Workshop. Inter-American Development Bank (IDB), Quito, Ecuador, June 19, 2015.
16. Texas Society of Professional Engineers (TSPE), 79th Annual Meeting. Houston, June 17-19, 2015.
17. *"Concrete Pavements and Environmental Sustainability"*, Workshop. Piura, Perú. May, 29, 2015.
18. *"Road Maintenance and Preservation"*. Workshop. Construction Management Institute, Piura, Perú, Lima, May 26-27, 2015.
19. *"Concrete Pavements and Environmental Sustainability"*, Workshop. Lima, Perú. May, 25, 2015.
20. "Infrastructure Management and Strategies for Roadway Maintenance". XXX Meeting of Council of Directors of Highway Transportation Agencies in Ibero-LatinAmerica. Managua, Nicaragua, May, 22, 2015.
21. *"Pavement Asset Management Overview"*. Workshop. Ninth International Conference on Managing Pavement Assets. Blacksburg, Virginia, U.S., May, 18, 2015.
22. "Highway Development & Management (HDM-4). Workshop. Ninth International Conference on Managing Pavement Assets. Blacksburg, Virginia, May, 18, 2015.
23. "Advanced Pavement Design", Workshop. Universidad EAFIT. Medellin, Colombia. April 20 - 25, 2015.
24. "The Impact of Maintenance Strategies on Highway Infrastructure: A Sustainable Approach". Federation of Pan-American Consultors (FEPAC). Lima, March 24, 2015.
25. *"Modern Methods for Pavement Evaluation"*. Workshop. Peruvian Board of Professional Engineers, Lima, Perú, Lima, March 20, 2015.
26. *"Road Maintenance and Preservation"*. Workshop. Construction Management Institute, Lima, Perú, Lima, March 13-14, 2015.
27. *"Pavement Design Using the MTC Peruvian Manual"*. Workshop. Construction Management Institute, Lima, Perú, Arequipa, March 10-11, 2015.

28. "*Pavement Design Using the MTC Peruvian Manual*". Workshop. Construction Management Institute, Lima, Perú, Chiclayo, March 7-8, 2015.
29. "*Methodology to Evaluate Stabilized and Non-Stabilized Soils*". Workshop. CORASFALTOS, Bogota, Colombia, December 04-05, 2014.
30. "*Methodology to Evaluate Stabilized and Non-Stabilized Soils*". Workshop. CORASFALTOS, Medellin, Colombia, November 28-29, 2014.
31. "*Maintenance of Pavements and Bridges*". Pre XVII Congreso Argentino de Vialidad y Tránsito. Buenos Aires, Argentina. November 3-6, 2014.
32. "*Pavement Design and Rehabilitation on Highway Projects*". International Workshop. Construction Industry Bureau. Quito, Ecuador. September 19, 20, 21, 2014
33. "*Pavement Design Using the 2013 Peruvian Manual*". Workshop. Construction Management Institute, Iquitos, Perú, August 27-28, 2014.
34. "*Pavement Quality Control*". CECATECO, Workshop. Lima, Perú, August 25-29, 2014.
35. "*Pavement Design Using the 2013 Peruvian Manual*". Workshop. Construction Management Institute, Lima, Perú, August 25-26, 2014.
36. "*Road Maintenance and Preservation*". Workshop. Construction Management Institute, Lima, Perú, August 22, 2014.
37. "*Pavement Design Using the 2013 Peruvian Manual*". Workshop. Construction Management Institute, Piura, Perú, May 26-27, 2014.
38. "*Pavement Design Using the 2013 Peruvian Manual*". Workshop. Construction Management Institute, Cusco, Perú, June 6-7, 2014.
39. "*Mechanistic-Empirical Pavement Design Guide AASHTO 2008*". Workshop. Bolivian Cement and Concrete Institute, La Paz, Bolivia, May 05-07, 2014.
40. "Environmental-Related Performance Measures Framework for Sustainable Asset Management Practices." ICTI 2014 International Conference on Transportation Infrastructure. Italy, April, 2014.
41. "*Advanced Pavement Design*", Workshop. Universidad EAFIT. Medellin, Colombia. April 7 - 12, 2014.
42. "*Flexible Pavements Design and Rehabilitation using the Mechanistic-Empirical Method AASHTO 2008*". Workshop. CORASFALTOS, Bogota, Colombia, April 04-05, 2014.

43. "*Pavement Design Using the 2013 Peruvian Manual*". Workshop. Construction Management Institute, Lima, Perú, February 03-04, 2014.
44. "*Pavement Design Methods*", Workshop. Universidad de Piura. Lima, Perú. February 01, 2014.
45. "Civil Engineering: A Vision into the Future". I Civil Engineering International Forum, Universidad Nacional de Ingeniería, Lima, Perú, December 17, 2013.
46. "Premature Pavement Failure due to Extraordinary Loads". XVII Ibero-Latin-American Asphalt Congress. Guatemala, November 18, 2013.
47. "Pavement Roughness Quality Control using Inertial Profilers". XVII Ibero-Latin-American Asphalt Congress. Guatemala, November 18, 2013.
48. "Applicability of the Mechanistic-Empirical Pavement Design Method AASHTO 2008 in Latinamerica". XVII Ibero-Latin-American Asphalt Congress. Guatemala, November, 19, 2013.
49. "*Concrete Pavements as Sustainable Structures*", II International Pavement Symposium. Lima, Perú. October 18-20, 2013.
50. "*Pavement Design Using the 2013 Peruvian Manual*". Workshop. Construction Management Institute, Cajamarca, Perú, October 16-17, 2013.
51. "*Pavement Design Using the 2013 Peruvian Manual*". Workshop. Construction Management Institute, Chimbote, Perú, October 14-15, 2013.
52. "*Pavement Design Using the 2013 Peruvian Manual*". Workshop. Construction Management Institute, Ica, Perú, October 12-13, 2013.
53. "*Concrete Pavement Design Using the Mechanistic-Empirical Pavement Design Guide AASHTO 2008*". Workshop. Guatemala Cement and Concrete Institute, Guatemala, October 07-08, 2013.
54. "Framework to Analyze Vehicle Miles Traveled Fee Implementation", XI European Transport Congress, Prague, Czech Republic, September 19-20, 2013.
55. "*Mechanistic-Empirical Pavement Design Guide AASHTO 2008*". Workshop. Construction Management Institute, Lima, Perú, September 02-03, 2013.
56. "*Concrete Pavements, Sustainable Design, Maintenance and Rehabilitation*" (Keynote Speaker), XII International Congress on Highway Infrastructure, Lima, Perú, August 30-31, 2013

57. "*Pavement Design and Rehabilitation*", Workshop. Universidad Ricardo Palma, Lima, Perú, August 14-21, 2013.
58. "*Design and Rehabilitation of Rigid and Flexible Pavements for Roads*", Workshop. Tacna, Perú, June 24-25, 2013.
59. "*Advanced Pavement Design*", Workshop. Universidad EAFIT. Medellin, Colombia. April 15 - 19, 2013.
60. "*New Techniques for the Design and Rehabilitation of Flexible and Rigid Pavements on Highway Projects*". Workshop. Construction Management Institute, Cusco, Perú, March 22-23, 2013.
61. "*New Techniques for the Design and Rehabilitation of Flexible and Rigid Pavements on Highway Projects*". Workshop. Construction Management Institute, Trujillo, Perú, March 18-19, 2013.
62. "*New Techniques for the Design and Rehabilitation of Flexible and Rigid Pavements on Highway Projects*". Workshop. Construction Management Institute, Huaraz, Perú, March 15-16, 2013.
63. "*New Techniques for the Design and Rehabilitation of Flexible and Rigid Pavements on Highway Projects*". Workshop. Construction Management Institute, Lima, Perú, March 11-13, 2013.
64. "*Engineering in Practice for a Sustainable Healthy Living Community Learning through Professional Practice*". Sun Conference in Teaching and Learning. University of Texas at El Paso, El Paso, Texas, U.S., February 28 – March 1, 2013.
65. "*State of the Art in Pavement Evaluation and Management*" (Keynote Speaker). 41st HOB Anniversary Conference. HOB, Lima, Perú, October 25 – 26, 2012.
66. "*Applicability of the Mechanistic-Empirical Pavement Design Method AASHTO 2008 (MEPDG to Performance-Based Contracts)*". Seminar. Inter-American Development Bank (IDB), San Jose, Costa Rica, November 15-16, 2012.
67. "*Pavement Rehabilitation and Management Techniques to Preserve Levels of Service*". Seminar. Inter-American Development Bank (IDB), San Jose, Costa Rica, November 15-16, 2012.
68. "*Equivalent Pavement Designs in Performance-Based Bids*". Seminar. Inter-American Development Bank (IDB), San Jose, Costa Rica, November 15-16, 2012.
69. "*2012 Soils, Geology, Geotechnical, and Pavements Peruvian Manual and the MEPDG AASHTO 2008*" (Keynote Speaker), XI International Congress on Highway Infrastructure, Lima, Perú, September 14-15, 2012.

70. “*Pavement Rehabilitation and Management Techniques to Preserve Levels of Service*”. Workshop. XI International Congress on Highway Infrastructure, Lima, Perú, September 14-15, 2012.
71. “*Asset Management Principles with Focus on Implementation*”. 4th Annual Executive Seminar Preserving Our Highway Assets, International Road Federation, Miami, Florida, September 11-13 2012.
72. “*The State of the Art in the Implementation of Road Management System*”. 4th Annual Executive Seminar Preserving Our Highway Assets, International Road Federation, Miami, Florida, September 11-13 2012.
73. “*Fair Division Models for Funding Allocation*”. 4th Annual Executive Seminar Preserving Our Highway Assets, International Road Federation, Miami, Florida, September 11-13 2012.
74. “*Applied to Andean Countries*”. *Best Road Engineering Practices* 1st. Andean Highway Congress. International Road Federation. Lima, Perú. August 20, 21, 22, 2012.
75. “*Mechanistic-Empirical Design Method AASHTO 2008 (MEPDG) Applied to High-Altitude Pavements*”. 1st Andean Highway Congress. International Road Federation. Lima, Perú. August 20, 21, 22, 2012.
76. “*Advanced Pavement Design*”, Workshop. Universidad EAFIT. Medellin, Colombia. May 7-11, 2012.
77. “*A Proposal for a Stochastic Pavement Management System of the San Francisco California Bay Metropolitan Transportation Commission*”, Workshop. International Congress of Investigation of AcademiaJournals.com, Juarez, Chihuahua, Mexico, April 24-27 2012.
78. “*Mechanistic-Empirical Pavement Design Method AASHTO 2008*”. Workshop. Construction Management Institute, Tarapoto, Perú, March 26-27, 2012.
79. “*Pavement Design*”, Workshop. Universidad de Piura. Lima, Peru. March 9- 10, 2012.
80. “*Pavement Management*”. Workshop. 3^{er} Middle East Regional Conference, International Road Federation, Manama, Kingdom of Bahrain, January 8-9, 2012.
81. “*Mechanistic-Empirical Pavement Design Guide AASHTO 2008*”. Workshop. Construction Management Institute, Huancayo, Perú, December 13-14, 2011.
82. “*Mechanistic-Empirical Pavement Design Guide AASHTO 2008*”. Workshop. Construction Management Institute, Cuzco, Perú, December 9-10, 2011.

83. “*Mechanistic-Empirical Pavement Design Guide AASHTO 2008*”. Workshop. Construction Management Institute, Piura, Perú, December 06-07, 2011.
84. “*Concrete Pavements and the Mechanistic-Empirical Pavement Design Guide – AASHTO 2008*”. Workshop. Cementos Progreso, Guatemala, November 09-10, 2011.
85. “*The State of the Art on Pavement Management*”, 3rd Annual Executive Seminar Preserving Our Highway Assets, International Road Federation, Orlando, Florida, August 2011.
86. “*Successful Pavements, Are you a Believer?*”, 3rd Annual Executive Seminar Preserving Our Highway Assets Seminar, International Road Federation, Orlando, Florida, August 2011.
87. “*Mechanistic-Empirical Pavement Design Guide AASHTO 2008*”. Workshop. Construction Management Institute, Arequipa, Perú, June 17-18, 2011.
88. “*Mechanistic-Empirical Pavement Design Guide AASHTO 2008*”. Workshop. Construction Management Institute, Trujillo, Perú, June 14-15, 2011.
89. “*Mechanistic-Empirical Pavement Design Guide AASHTO 2008*”. Workshop. Construction Management Institute, Tacna, Perú, June 10-11, 2011.
90. “*Mechanistic-Empirical Pavement Design Guide AASHTO 2008*”. Workshop. Construction Management Institute, Lima, Perú, June 07-08, 2011.
91. “*Urban Concrete Pavements*”, Conference, ASOCEM, Chiclayo, Peru, May 11-12, 2011.
92. “*Urban Concrete Pavements*”, Conference, ASOCEM, Trujillo, Peru, May 09-10, 2011.
93. “*Urban Concrete Pavements*”, Conference, ASOCEM, Arequipa, Peru, March 14-15, 2011.
94. “*Urban Concrete Pavements*”, Conference, ASOCEM, Lima, Peru, March 16-17, 2011.
95. “*Pavement Management*”. Workshop. Second IRF Middle East International Conference. International Road Federation. Abu Dhabi, United Arab Emirates, November 2010.
96. “*Mechanistic-Empirical Pavement Design Guide AASHTO 2008*”. Workshop. International Road Federation. Bogota, Colombia, November 2010.
97. “*Economic Analysis for Highway Project Investments*”, Workshop. Universidad de Piura. Perú. October 2010.

98. “*The State of the Art on Pavement Management*”, 2nd Annual Executive Seminar Preserving Our Highway Assets, International Road Federation, Orlando, Florida, August 2010.
99. “*What is a Successful Pavement?*”, 2nd Annual Executive Seminar Preserving Our Highway Assets Seminar, International Road Federation, Orlando, Florida, August 2010.
100. “*Pavement Design*”, Workshop. Universidad de Piura. Peru. July 2010.
101. “*Mechanistic-Empirical Pavement Design Guide – AASHTO 2008*”. Cement and Concrete Costarican Institute, San Jose, Costa Rica, June 2010.
102. “*Equivalent Pavement Designs: Rigid and Flexible*”. Cement and Concrete Costarican Institute, San Jose, Costa Rica, June 2010.
103. “*Guidelines for the Development of Equivalent Pavement Designs: Rigid and Flexible in the Bidding Process*” (Keynote speaker), 7th Transport Infrastructure International Congress, Lima, Perú, December 2009.
104. “Asset Management Tools for Right-of-Way Advanced Acquisition”, 8th National Conference on Transportation Asset Management”, Conference, Portland, Oregon, October 2009.
105. “*Pavement Design State of the Art*”, Workshop, Universidad de Piura, Lima, Perú, August 2009.
106. “What is a Successful Pavement?”, Preserving Our Highway Assets Seminar, International Road Federation, Orlando, Florida, August 2009.
107. “Considerations for Flexible vs. Rigid Pavement Designs? Preserving Our Highway Assets Seminar, International Road Federation, Orlando, Florida, August 2009.
108. “The State of the Art on Pavement Management”, Preserving Our Highway Assets Seminar, International Road Federation, Orlando, Florida, August 2009.
109. “*Pavement Design*”, Workshop. Universidad de Piura. Peru. August 2009.
110. “*Soils Stabilization*”, Catholic University, Santiago de Chile, Chile, May 2009.
111. “*Pavement Design and Soils Stabilization*”, Workshop, Construction Management Institute, Cusco, Peru, May 2009.
112. “*Pavement Management Fundamentals*”, Workshop, California Pavement Preservation Conference, Oakland, California, April 2009.

113. *"Equivalent Designs of Rigid and Flexible Pavements in the Bidding Process"*, Workshop, College of Engineers, Peru, March 16-17, 2009.
114. *"Development and Management of Road Infrastructure: a Challenge to Our Present"*, Anniversary of LEMC International Conferences, Piura, Peru, November 8, 2008.
115. *"Highly Successful Pavements, Experience in Texas"*, (Keynote speaker), VII International Infrastructure Congress, August 28, 2008.
116. "Pavement Design Fundamental Concepts and Applications", Binational Workshop Mexico-U.S. on Paving and Health, Ciudad Juarez, Mexico, December 2007.
117. "Advance Acquisition of Right of Way: When to Buy, What to Buy", Seventh National Conference on Transportation Asset Management, New Orleans, Louisiana, U.S. November 2007.
118. "Better Practices and Tools for Managing Road Assets", First Latin-American Regional Conference, International Road Federation, Fort Lauderdale, Florida, U.S., October 2007.
119. *"Feasibility Study for Highway Projects: Concepts and Tools"* (Keynote speaker), VI International Infrastructure Congress, Construction Management Institute, Lima, Perú, August 2007.
120. *"State of the Art in Pavement Evaluation"* (Keynote speaker), Pre-XV Argentine Congress on Traffic and Road Safety in Buenos Aires, Argentina, August 2007.
121. *"State of the Art in Pavement Design"*, Workshop, Pre-VI Congress of Road Infrastructure, May 4-5, 2007.
122. *"New Design Techniques and Pavement Rehabilitation"*, Iquitos, Peru, April 28, 2007.
123. *"Concrete Pavements in the United States of America"*, Workshop, Lima, Peru, October 28, 2006.
124. *"Pavement Management Systems"*, V International Highway Infrastructure Congress, Construction Management Institute, Lima, Perú, July 7-8, 2006.
125. *"Implementation of a Mechanistic Pavement Design Guide NCHRP 1-37A in Texas"* (Keynote speaker), IV Congress on Highway Infrastructure, Construction Management Institute, Lima, Perú, September 2005.
126. "Development of an Analysis Tool to Assess the Viability of Toll Highway Projects Paper and Presentation" (Keynote Speaker), IV Congress on Highway Infrastructure, Lima, Perú, September 2005.
127. "Pavement Design: A Vision into the Future – AASHTO Guidelines 2002", Workshop , Peruvian Board of Engineers, Lima, Perú, 2002

128. “Asphalt in the Construction of Flexible Pavements”, Workshop Peruvian Road Association, Lima, Perú, 2001.

Magazines and Articles

1. “Lessons Learned Using Rubberized Asphalt to Improve Pavement Performance”. Vialidad y Transporte Lationamericano, Perú, March, 2016.
2. “Premature Pavement Failure”. Vialidad y Transporte Lationamericano, Perú, June, 2015.
3. “Road Maintenance: A Shared Challenge, Past, Present, and Future”. La Vial. Argentina, December 2014.
4. “Rigid versus Flexible Pavements: Myths and Realities”. Vialidad y Transporte Lationamericano, Perú, November, 2014.
5. “Interview: Outstanding Engineers”. *Journal Construyendo Caminos*, Perú, Year 3, Vol. 13, November-December, 2014.
6. “Pavement Evaluation: Criteria and Applications”. La Vial. Argentina, December 2007.
7. “Mechanistic-Empirical Pavement Design”. Carreteras. Argentina, August 2007.
8. “Management and Highway Infrastructure”. *El Ingeniero de Lima* No 35. January-February 2002.
9. “Preventive Maintenance and Pavement Preservation”. *Caminos del Perú*, Edición No 10. November-December 2001.
10. “Pavement Recycling: Feasible Alternatives for Highway Rehabilitation” *Caminos del Perú* Edición No 9. August-October 2001.
11. “Technological Advance and Resource Optimization in Road Projects”. *Civil Engineer Magazine*, September-October 1995.

RESEARCH

In Progress Funded Research Projects (*Principal Investigator of italicized items*)

1. Cost-Effective Alternatives to Seal Coats, Texas Department of Transportation (TxDOT), January 2015 – August 2017, \$448,765 – UTEP 134,983 (with Tandon at UTEP, and Bhasin at UT-Austin-CTR).

2. *Quantification of the Impact of a Road's Condition on Emissions, Texas Department of Transportation (TxDOT), July 1, 2014- June 30, 2016 , \$288,879 - UTEP \$ 168,879 (with Nazarian and Abdallah at UTEP, and Yu, Qiao, and Azimi at Texas Southern University).*
3. *Consequences of Delayed Maintenance of Highway Assets, NCHRP Project 14-20A, December 12, 2013 – September 30, 2016, National Cooperative Highway Research Program, \$ 450,000 – UTEP \$ 249,500 (with Yan , Nazarian and Abdallah at UTEP; Jackson, and Yapp at Nichols Consulting Engineers, Chtd; and Roberts at Spy Pond Partners).*
5. *Guidance on Pavement Management Systems, February 2010 – December 2016, Metropolitan Transportation Commission in California (MTC) subcontracted through Nichols Consulting Engineers, \$ 366,620.*
6. USA/Peru Study Abroad Program: Global and Regional Sustainability Engineering, September 2012 – July 2015. United States Department of State. \$ 250,000 (with Ferregut as Principal Investigator, Cheu Espiritu, Taboada, and Vargas).
7. Center for Advanced Infrastructure and Transportation (CAIT) Tier 1 UTC Consortium Led by Rutgers, The State University of New Jersey, January 1, 2012 - January 31, 2014. RUTGERS UNIVERSITY. \$ 150,000 (with Nazarian as Principal Investigator, Cheu, Carrasco, Tandon, Hernandez).
8. Collection of Materials and Performance Data for the Texas Flexible Pavements and Overlays, 2010 – August 2015, Texas Department of Transportation (TxDOT), \$ 1'831,711 – UTEP \$ 599,700 (with Nazarian as Principal Investigator at UTEP; Walubita and others at the Texas Transportation Institute).

Completed Funded Research Projects (*Principal Investigator of italicized items*)

1. *A Multi-Objective Sustainable Model for Transportation Asset Management Practices, January 15, 2014 - December 31, 2015. Tier 1 University Transportation Center Consortium led by Rutgers University, \$ 90,000.*
2. Performance Life of Various HMA Mixes in Texas, September 2011- August 2014. Texas Department of Transportation (TxDOT), March 2011, \$ 306,000 (with Nazarian as Principal Investigator, Tandon, Abdallah, Celaya).
3. Improvement of Construction Quality Control by Using Intelligent Compaction Technology for Base and Soil, November 2012- November 2013. Texas Department of Transportation (TxDOT), November 2012, \$ 212,094 (with Nazarian as Principal Investigator, Carrasco, Aldouri, Marshall).

4. *Evaluate the Improvement in Pavement Ride, Distress, and Condition Based on Different Treatment Types, September 2011 – August 2013. Texas Department of Transportation (TxDOT). \$ 338,984 - UTEP \$ 170,572 (with Nazarian, and Abdallah at UTEP, Wimsatt and others at the Texas Transportation Institute).*
5. *Using Fair Division Methods for Allocating Funds, September 2011 – August 2013. Texas Department of Transportation (TxDOT). \$ 187,185 (with Taboada, Espiritu, and Fullerton at UTEP).*
6. *El Paso Border Master Plan, April 2012 – April 2013, Texas Department of Transportation (TxDOT), \$ 250,000 (with Hernandez as Principal Investigator).*
7. *Validation and Calibration of Chasqui Profiler, August 2012 – December 2012. Fugro Consultants, \$ 8,554 (with Nazarian)*
8. *Implementation of New Pavement Performance Prediction Models in PMIS, October 2011 - August 2012. Texas Department of Transportation (TxDOT). \$ 9,100. (with Wimsatt and others at the Texas Transportation Institute).*
9. *Long-Range Strategic Issues Affecting Preservation, Maintenance, and Renewal of Highway Infrastructure, June 2010 – August 2012, National Highway Cooperative Highway Research Program (NCHRP), \$1,000,000 - UTEP \$ 50,313 (with Nazarian at UTEP, Anderson and others at Texas A&M and University of Houston).*
10. *Management Science Applications for TxDOT – Scoping Study, September 2010 – August 2011 Texas Department of Transportation (TxDOT), \$ 199,267 – UTEP \$ 22,292 (with Waller and others at the University of Texas in Austin, and Walewski at Texas A&M).*
11. *Evaluation and Development of Pavement Scores, Performance Models and Needs, September 2008 – August 2011, Texas Department of Transportation (TxDOT), \$768,716 – UTEP 206,758 (with Nazarian and Abdallah; Wimsatt, Freeman, Scullion, and Gharaibeh at Texas Transportation Institute; and Papagiannakis and Weissmann at UTSA).*
12. *El Paso Regional Ports of Entry Operations Plan, June 2010 – June 2011, Texas Department of Transportation (TxDOT), \$ 90,374 (with Hernandez as Principal Investigator).*
13. *Implementation of ROW Acquisition Decision-Support-Tools, September 2009 – August 2010, Texas Department of Transportation (TxDOT), \$ 74,209 – UTEP \$ 22,198 (with Krugler, Feldman, and Butenko at Texas Transportation Institute and Texas A&M).*
14. *Development of a GIS Fiber Optics Asset Management System, December 2009 – June 2011, City of El Paso, \$119,280 (with Aldouri and Nazarian).*
15. *Technical and Training for Metropolitan Transportation Commission’s Pavement Management, October 2008, December 2009, Metropolitan Transportation Commission in California (MTC), \$ 40,354 (subcontract to Texas A&M Research Foundation).*

16. Integrating the Transportation System with a University Campus Transportation Master Plan, Texas Department of Transportation (TxDOT), May 2009 – August 2009, \$ 60,886, (with Cheu as Principal Investigator, and Aldrete-Sanchez at Texas Transportation Institute).
17. *Asset Management – Texas Style, September 2008 – August 2009, Texas Department of Transportation (TxDOT), \$ 107,950 - UTEP \$ 41,500 (with Krugler, Feldman, and Butenko at Texas Transportation Institute and Texas A&M).*
18. *Enhancements to El Paso’s GIS based Infrastructure Management Systems, August 2008 – June 2009, City of El Paso, \$ 106,015.*
19. *Considerations for Rigid vs. Flexible Pavement Designs When Allowed as Alternate Bids, November 2007- December 2008, Texas Department of Transportation (TxDOT), \$120,000 - UTEP \$ 17,601 (with Wimsatt, Scullion, Freeman, and Krugler at Texas Transportation Institute).*
20. Synthesis Study on Variable Asphalt Shot Rates for Seal Coats, Texas Department of Transportation (TxDOT), September 2007 – August 2008, \$78,654 (with Krugler at Texas Transportation Institute).
21. ROW Real Property Asset Management Architecture, Texas Department of Transportation (TxDOT), September 2007 – August 2008, \$ 282,175 (with Quiroga at Texas Transportation Institute).
22. *Program to Support the Development of Long-Lasting Pavement Technology for Roads in Paraguay, Inter-American Development Bank (IDB) and Unites States Trade Development Agency (USTDA), May 2007 – June 2008, \$ 362,432. (Texas Transportation Institute).*
23. A Data Base for Successful Pavement Sections in Texas – Including Both Experimental and Non-Experimental Pavements, Texas Department of Transportation (TxDOT), September 2006 – August 2007, \$ 353,033 (with Krugler at Texas Transportation Institute).
24. Develop a Knowledge Management System for TxDOT Pavement-Related Corporate Knowledge, Texas Department of Transportation (TxDOT), September 2005 – August 2006, \$ 228,146 (with Krugler at Texas Transportation Institute and Fults at Center of Transportation Research)
25. Estimating Revenues Using a Toll Viability Screening Tool, Texas Department of Transportation (TxDOT), September 2003 – August 2004 (with Stockton and Smith at Texas Transportation Institute and Texas A&M).

Proposals Submitted (*Principal Investigator of italicized items*)

1. *Development of a Sustainable Performance-Based Methodology for Strategic Metropolitan Planning Based on MAP-21, February 2016, \$ 120,000. Under review.*

2. *Guide for Timing of Asphalt-Surfaced Pavements Preservation (NCHRP), NCHRP Project 14-38, December 2015, \$ 300,000 (with Linda Pierce at Nichols Consulting Engineers). Under review.*
3. *Innovative Tools and Techniques in Identifying Highway Safety Improvement Projects, October 2015, \$ 324,551 (with Aldouri and Smith at UTEP, and Kockelman at UT Austin). Not Awarded*
4. *Identification of Effective Next Generation Pavement Performance Measures and Asset Management Methodologies to Support MAP-21, July 2015, \$ 112,880 (with Philip Tiewater at Opus International Consultants Inc., and Margot Yapp at Nichols Consulting Engineers) Not Awarded.*
5. *Developing a Surface Drainage Rating for inclusion in TxDOT's Asset Management System, April 2015, \$174,387 (with Tandon at UTEP). Not Awarded*
6. *Development of a Methodological Framework for Cross-Asset Resource Allocation to Support Infrastructure Management, April 2015, \$349,497 (with Taboada, Espiritu, Fullerton at UTEP). (No winner, project not funded by TxDOT)*
7. *Effect of Preservation on Pavement Performance and Life Prediction in Pavement Design, Texas Department of Transportation (TxDOT), August 2014, \$300,512 (with Nazarian and Abdallah at UTEP). (No winner, project not funded by TxDOT)*
8. *Sustainable Perpetual Asphalt Pavements and Comparative Analysis of Lifecycle Cost to traditional 20-year Pavement Design, Texas Department of Transportation (TxDOT), August 2014, \$406,732 – UTEP 182,715 (with Ashtiani at UTEP, and Bhasin and Yetkin at UT-Austin-CTR). (Not Awarded)*
9. *Cost-Effective Alternatives to Seal Coats, Texas Department of Transportation (TxDOT), August 2014, \$448,765 – UTEP 134,983 (with Tandon at UTEP, and Yetkin and Bhasin at UT-Austin-CTR). (Awarded)*
10. *A Multi-Objective Sustainable Model for Transportation Asset Management Practices, Tier 1 University Transportation Center Consortium led by Rutgers University, November, 2013 - UTEP \$90,000. (Awarded)*
11. *Quantification of the Impact of a Road's Condition on Emissions, Texas Department of Transportation (TxDOT), July 2013, \$288,879 - UTEP \$ 168,879 (with Nazarian and Abdallah at UTEP, and Yu, Qiao, and Azimi at Texas Southern University). (Awarded)*
12. *Consequences of Delayed Maintenance of Highway Assets, National Cooperative Research Program (NCHRP), NCHRP Project 14-20A, June 2013, \$ 450,000 – UTEP \$ 249,500 (with Yan, Nazarian and Abdallah at UTEP; Jackson, and Yapp at Nichols Consulting Engineers, Chtd; and Roberts at Spy Pond Partners). (Awarded)*

13. *Developing of a Sustainable Asset Capital Improvement Planning Model (ACIPM) for the City of El Paso, City of El Paso, December 2012, \$ 288,418 (with Aldouri and Fullerton). (Awarded – Not Funded)*
14. *Developing a Pavement-Maintenance Database System, National Cooperative Research Program (NCHRP), NCHRP Project 14-31, December 2012, \$ 250,000 – UTEP \$ 130,000 (with Nazarian, and Abdallah at UTEP; Jackson, and Yapp at Nichols Consulting Engineers, Chtd; and Rafiq and Roberts at Deighton Associates). (Not awarded)*
15. *Cross-Asset Resource Allocation and the Impact on System Performance, National Cooperative Research Program (NCHRP), NCHRP Project 08-91, October 2012, \$ 500,000 – UTEP \$ 260,000 (with Fullerton, Taboada, Espiritu, and Nazarian at UTEP; Jackson, Yapp, and Senn at Nichols Consulting Engineers, Chtd; and White, Katara, Muench, and Latham at Pavia Systems, Inc.). (Front Runner, Not awarded)*
16. *Calibration and Validation of Chasqui Profiler, February 2012, \$ 20,600 – UTEP \$8,554 (with Nazarian at UTEP, and Williams at Fugro). (Awarded)*
17. *Best Practices in GIS-Based Asset Management, National Cooperative Research Program (NCHRP), NCHRP Project 08-87, November 2011, \$ 500,000 – UTEP \$ 293,853 (with Aldouri and Nazarian at UTEP, and Williams and others at Fugro). (Not awarded)*
18. *USA/Peru Study broad Program: Global and Regional Sustainability Engineering. April 2012, \$ 225,000 (with Ferregut as Principal Investigator, Taboada, Espiritu, Vargas, and Cheu). (Awarded)*
19. *Validation of TxDOT Flexible Pavement Skid Prediction Model, Texas Department of Transportation (TxDOT), March 2012, \$340,506 – UTEP \$ 189,911(with Nazarian, Tandom, Garibay, and Rocha at UTEP, and Prozzi, Murphy, and Smit, UT-Austin-CTR). (Not awarded)*
20. *Development of a Procedure for Gathering and Storing Pavement Layer and Work History Information, Texas Department of Transportation (TxDOT), March 2012, \$285,121 (with Nazarian, Tandon, Aldouri, and Abdallah). (No winner, project not funded by TxDOT)*
21. *Evaluate the Improvement in Pavement Ride, Distress and Condition Based on Different Treatment Types, Texas Department of Transportation (TxDOT), March 2011, \$ 338,984- UTEP \$ 170,572 (with Nazarian and Abdallah at UTEP, and Wimsatt at the Texas Transportation Institute, Texas A&M). (Awarded)*
22. *Quantitative Relationship Between Safety and Reduced Roadway Condition Maintenance, Texas Department of Transportation (TxDOT), March 2011, \$ 195,155 (with Hernandez, Nazarian, Aldouri). (Not awarded)*
23. *Using “Fair Division” Methods for Allocating Transportation Funds, Texas Department of Transportation (TxDOT), March 2011, \$ 187,185 (with Taboada, Espiritu, and Fullerton). (Awarded)*

24. Performance Life of Various HMA Mixes in Texas Texas Department of Transportation (TxDOT), March 2011, \$ 306,000 (with Nazarian as Principal Investigator, Tandon, Abdallah, Celaya). (Awarded)
25. *Evaluation of Pavement Rutting and Distress Measurements, Texas Department of Transportation (TxDOT), May 2010, \$ 287,778 (with Nazarian). (Not awarded)*
26. *Management Science Applications for TxDOT – Scoping Study, Texas Department of Transportation (TxDOT), March 2010, \$ 199,267 – UTEP \$ 22,292 (with Waller and others at the University of Texas in Austin, and Walewski at Texas A&M). (Awarded)*
27. *A Comprehensive Evaluation of the Development of a Level of Performance and Level of Service for TxCAP Evaluation Systems, Texas Department of Transportation (TxDOT), March 2010, \$ 330,223 - UTEP \$ 59,474. (with Texas A&M and University of Texas at San Antonio). (Not awarded)*
28. *Long-Range Strategic Issues Affecting Preservation, Maintenance, and Renewal of Highway Infrastructure, National Highway Cooperative Highway Research Program (NCHRP), February 2010, \$1,000,000 - UTEP \$ 50,313 (with Nazarian at UTEP, Anderson and others at Texas A&M and University of Houston). (Awarded)*
29. *Evaluation of Skid Measurements Used by TxDOT, March 2010, Texas Department of Transportation (TxDOT), March 2010, \$ 327,039 – UTEP 232,469 (with Nazarian at UTEP, and Dessouky and Weissmann at UTSA). (Not awarded)*
30. *StreetSaver Training and Guidance Services, November 2009, Metropolitan Transportation Commission (MTC-California), November 2009, \$ 97,320.22 (with Nichols Consulting Engineers, Chtd.). (Awarded)*
31. *Development of a GIS Fiber Optics Asset Management System, City of El Paso, October 2009, \$94,415 (with Aldouri and Nazarian). (Awarded)*
32. *Implementation of ROW Acquisition Decision-Support-Tools, Texas Department of Transportation (TxDOT), August 2009, \$ 74,2092 – UTEP \$ 22,198 (with Krugler, Feldman, and Butenko at Texas Transportation Institute and Texas A&M). (Awarded)*
33. *Development of a Performance Measurement Based Methodology to Objectively Compare Operational Improvements with Capacity Additions, Texas Department of Transportation (TxDOT), March 2009, \$ 177,577. (Not awarded)*
34. *Trans Atlantic Education System in Transportation Sciences and Logistics, U.S. Department of Education Systems, March 2009, \$ 191,681 (with University of Arizona, Czech Technical University and University of Zilina). (Awarded)*
35. *Asset Management for Safety and Operations, Texas Department of Transportation (TxDOT), August 2008, \$ 242, 449 (with Texas Southern University). (Not awarded)*

TEACHING

Graduate Courses (Semester: Student's Evaluation)

CE 5365 Decision Making in Infrastructure System Design and Evaluation (Fall 2015, Spring 2013: 4.800)
CE 6301 Infrastructure Management (Fall 2014:4.1, Fall 2012: 4.625, Fall 2011:4.8181, Fall 2010:4.5, Fall 2009, Fall 2008: 4.291)
CE 5351 Mechanistic Pavement Design and Analysis (Spring 2012: 4.6666, Spring 2011: 4.5)
CE 6195 Civil Engineering Seminar (Spring 2014: 5.000, Spring 2011: 4.7)
CE 6315 Infrastructure Planning (Spring 2010: 4.5714)
CE 5324 Construction Management (Spring 2008: 4.7000)

Undergraduate Courses (Semester: Student's Evaluation)

CE 2315 Statics (Spring 2016, Fall 2010: 4.5277)
CE 3336 Civil Engineering Materials (Spring 2015, Spring 2010: 4.1000)
CE 3313 Engineering Measurements (Fall 2009: 2.4461)
CE 4188 Senior Design I (Fall 2013: 3.9090)
CE 4288 Senior Design II (Spring 2014:4.4117, Fall 2013: 4.1304)

TEACHING ACCOMPLISHMENTS

New Programs and Courses Developed

“Engineering in Practice for a Sustainable Healthy Living Community: 21st Century Engineering Challenges”. College of Engineering. The program seeks to provide students the opportunity to interact with professional engineers extending their education beyond the classroom. The program merges education, research, and professional practice to propose solutions to engineering problems. Started August 2010 (engineeringinpractice.utep.edu).

The program received the NCEES Engineering Award for Connecting Professional Practice and Education award from National Council of Examiners for Engineering and Surveying in three consecutive years for the projects:

“Multidisciplinary Design of a Sustainable, Environmentally Friendly, and Affordable House”, June 2013.

“Multidisciplinary SMART Design of Fire Station 513”, June 2012.

“Development of a Sustainable Infrastructure Management System for a City”, June 2011.

Education

Principles and Practices for Enhanced Maintenance Management Systems, NHI Course No. FHWA-NHI-134112. January 26, February 2, February 9, 2016. Webinar.

9th International Technology, Education and Development Conference (INTED), Madrid, Spain, March 2 – March 4, 2015.

Sun Conference in Teaching and Learning. University of Texas at El Paso, El Paso, Texas, U.S., February 28 – March 1, 2013.

Advanced National Teaching Institute Workshop, American Society for Engineering Education, October 7-8th, 2012, Seattle, Washington.

4th Annual Symposium on Engineering & Liberal Education and Integrate to Innovate Faculty Institute, June 3-4th, 2011, Union College, Schenectady, New York.

2nd National Effective Teaching Institute Workshop, American Society for Engineering Education, June 17-19th, 2010, Louisville, Kentucky.

SERVICE AND HONORS

Professional Honors, Prizes, Fellowships

Vice President of the North-American Region, International Society for Maintenance and Rehabilitation of Transport Infrastructures (ISMARTI). March 2016- Present.

Chair of the International Subcommittee on International Activities, Infrastructure and Systems Committee, Transportation and Development Institute, American Society of Civil Engineers (ASCE), January 2015 – Present.

EAFIT University, Best Professor of the Pavement Engineering and Highway Design Graduate Program, Colombia. December 2014.

American Society of Civil Engineers (ASCE), Journal of Infrastructure Systems. Outstanding Reviewer in 2013. April 2014.

National Council of Examiners for Engineering and Surveying, NCEES Engineering Award for Connecting Professional Practice and Education. Project “Multidisciplinary Design of a Sustainable, Environmentally Friendly, and Affordable House”, June 2013.

National Council of Examiners for Engineering and Surveying, NCEES Engineering Award for Connecting Professional Practice and Education. Project “Multidisciplinary SMART Design of Fire Station 513”, June 2012.

National Council of Examiners for Engineering and Surveying, NCEES Engineering Award for Connecting Professional Practice and Education. Project “Development of a Sustainable Infrastructure Management System for a City”, June 2011.

Chi Epsilon Advisor, UTEP, September 2010.

Outstanding Performance Award, Research and Sponsored Projects, UTEP, May 2008.

Chair of the International Road Federation Road Asset Management-Pavement Preservation Task Force, IRF, August 2009 – December 2011.

Chair of the International Road Federation Pavement Management Task Force, IRF, January 2012 – Present.

International Road Federation (IRF) Fellowship, August 1997 (Selected as fellow in a worldwide competition. 13 fellows were selected).

UTEP Committees Served

1. College of Engineering Council, Representative of the Department of Civil Engineering, August 2015 – Present.
2. Faculty Search Committee, Construction management or sustainable building materials Faculty Position, July 2013 – December 2013.
3. College of Engineering Infrastructure and Sustainability Team, January 2012 - Present.
4. Faculty Search Committee, Geotechnical and Structural Faculty Positions, January 2011 – December 2012.
5. Faculty Council Committee, College of Engineering, September 2011 – August 2011. Undergraduate Curricula Committee, College of Engineering, August 2009 – May 2011.
6. Mentor Program Panel Discussion, Center of Teaching Excellence, April 2011. Sustainable Engineering, Judge for Energy Projects, Industrial Engineering, Fall 2010 (December 2010, and Spring 2011 (April 2011).
7. Construction Management Internship Program, Preparation of Guidelines, July 2009.
8. Faculty Search Committee, Construction Management Faculty Position, March 2009.
9. Ph.D. Dissertations (as Chair)

Vavrova, Marketa. “Development of a Multi-objective Approach for Asset Management Decision Making.” UTEP, May 2016 (expected).

Makahaube, Johan. “A Quality Based-Approach to Support Project Management Practices in Local Government Agencies”, UTEP, December 2016 (expected).

Ramirez, Rafael.” A Stochastic Approach for Pavement Condition Projections and Budget Needs the MTC for Pavement Management System.” UTEP, May 2015.

Al-Zou’bi, Mazin. “Development of Systematic Approach to Manage Missing Data in Pavement Management Systems.” UTEP, May 2013.

10. M.S. Thesis (as Chair)

Gutierrez, Sandra. "Asset Management Tools to Support the Development of Preservation Programs for Guardrails." UTEP, May 2016 (expected).

González, Oscar UTEP, "Quantification of the Impact of Roadway Condition on Gas Emissions." UTEP, May 2016 (expected)

Ramirez, Armando. "Optimization for the Allocation of Funds for Pavement Maintenance in Pavement Management Systems," May 2016 (expected).

Jaña Arellano, Cristian Gonzalo. "Implementation of the AASHTO 2008 Mechanistic Empirical Pavement Design Guide in Piura," Universidad de Piura, Perú, May 2016.

Montes, Edith. "Using Fair Division Methods for Funding Allocation," UTEP, May 2014.

Saenz, Daniel. "Improvement in Pavement Ride, Distress, and Condition Based on Different Treatment Types," UTEP, December 2013.

Mena Abadía, Wilmer Bernardo, "Calibration and Implementation of the MEPDG Climatic Model AASHTO 2008 in Colombia." Universidad EAFIT, Colombia, April 2013.

Vavrova, Marketa. "Development of an Electronic Vehicle Miles Traveled Toll Model." UTEP, May 2012.

Gallegos, Alejandra. "Continuous Reinforced Concrete Pavement Performance Models for Pavement Management," UTEP, May 2012.

Huaman, Nestor. "Permanent Deformation in Asphalt Mixes and the Deterioration of Pavement in Peru." Universidad Nacional de Ingeniería, December 2011.

Quintana, Luis. "Development of a GIS Fiber Optics Asset Management System for the City of El Paso." UTEP, August 2011.

Francis, Dora. "Asset Management Applications to Improve Right-of-Way Acquisitions." UTEP, December 2009.

Gandhar, Wazalwar. "Optimizing Sample Size for Acceptance Plans in Highway Construction," UTEP, December 2009.

Camacho, Gema, "GIS-based Tool for Assessing Hydraulic Performance of Drainage Infrastructure System in El Paso," UTEP, May 2009.

11. Ph.D. Dissertations (as member)

Rodriguez, Danniell. "Performance Life of Various Hot Mix Asphalt Mixtures in Texas". Chair Dr. Soheil Nazarian, UTEP, August 2015.

Zokaei Ashtiani, Mohammad Ali. "Development of Finite Element Based Software for Analyzing the Rigid Pavement (NYSlab)". Chair Dr. César Carrasco, UTEP, May 2014.

Mazari, Mehran. "Modulus-Based Construction Specification for Compaction of Earthwork and Unbound Aggregate", Chair Dr. Soheil Nazarian, UTEP, May 2014.

Azari, Hoda, "Numerical Study on Performance and Sensitivity of Seismic Nondestructive Methods to Identify Deterioration in Concrete Structures," Chair Dr. Soheil Nazarian, UTEP, May 2013.

Islam, Mouyid. "Modeling Large-Truck Involved Crashes: An Econometric Modeling Framework". Chair Dr. Salvador Hernandez, UTEP, December 2012.

Celaya, Manuel. "Evaluation of NDT Technologies to Assess Presence and Extent of Delamination of HMA Airfield Pavements", Chair: Dr. Soheil Nazarian, UTEP, May 2011.

Abdallah, Imad. "An Expert System Approach to Improve and Preserve Flexible Pavement at Intersections", Chair: Dr. Soheil Nazarian, UTEP, May 2011

Galicia, Luis. "Methodology for Bus Rapid Transit Ridership Estimation and Deployment Phases Implementation", Chair: Dr. Ruey (Kelvin) Cheu, UTEP, December 2010.

Vidaña Bencomo, Jose Osiris. "Methodology to Convert Transportation Planning Origin-Destination Matrix into a Microscopic Traffic Simulation Origin Destination Matrix", Chair: Dr. Ruey (Kelvin) Cheu, UTEP, December 2011.

Wanyan, Yaqui. "Expert System Design Guide for Lower Classification Roads Over High PI Clays", Chair: Dr. Soheil Nazarian, UTEP, December 2008.

12. M.S. Thesis (as member)

Jan Kapusta. "Safety Measures for Trucks: A Comparison between EU and U.S.", Chair Dr. Ruey (Kelving) Cheu, UTEP, August 2013

Luis Hernandez. "An Exploratory and Comparative Analysis of Freight Transportation in EU and U.S. Highways", Chair Dr. Ruey (Kelving) Cheu, UTEP, August 2013 (expected).

Malina, Petr. "Analysis of Isolated Traffic Signal Control Systems", Chair: Dr. Ruey (Kelvin) Cheu, UTEP, May 2012.

Gona, Ramakanth. "Enterprise Transformation through a Zachman-Bayesian Framework to Improve Efficiency & Productivity", Chair: Dr. Eric Smith (Industrial Engineering). UTEP, December 2011.

Moreno, Olivia. "Multi-Objective System Design Optimization Considering

Environmental Emissions”, Chair: Dr. Heidi Taboada (Industrial Engineering). UTEP, May 2011.

Chenna, Vasukumar. “Component Replacement Schedules for Electricity Distribution Systems using Evolutionary Algorithms”, Chair: Dr. Jose Espiritu (Industrial Engineering), UTEP, December 2010.

Valdez, Gabriel. “A Risk Analysis Framework for Toll Road Revenue Forecasts”, Chair: Dr. Ruey (Kelvin) Cheu, UTEP, May 2010.

Zuniga, Cynthia. “Estimating Variation in Stiffness and Volume Change of Clays from Geochemical and Index Properties”, Chair: Dr. Soheil Nazarian, UTEP, December 2009.

Mejia, Dante. “Finite Element Modeling of Nondestructive Test Methods Used for Detection of Delamination in Hot Mix Asphalt Pavements”, Chair: Dr. Soheil Nazarian, UTEP, December 2009.

Acevedo, Loreto. “Improved Performance of Soils Stabilized with FBC Ash”, Chair: Dr. Guillermo Thenoux, Catholic University, Santiago de Chile, Chile, May 2009.

Deshmukh, Maithilee. “Development of Equations to Determine the Increase in Pavement Condition due to Treatment and the Rate of Decrease in Condition after Treatment for a Local Agency Pavement Network”, Chair: Dr. Roger Smith, Texas A&M, May 2009.

Lei, Hao. “Allocate Emergency Response Vehicles to Cover Critical Infrastructures”, Chair: Dr. Ruey (Kelvin) Cheu UTEP, December 2008.

13. Non-Thesis Graduate Students

Mejía, Saúl, “Implementing the AASHTO Mechanistic-Empirical Pavement Design-Guide in Texas”, UTEP, May 2016 (expected).

Varela E. “Dynamic Adjustment of PCI Family Curves on Field Inspection History”, UTEP, December 2014.

Ibarra, Iraki. “Benefits of Early Right-of-Way Acquisition”, UTEP, December 2010.

Esquivel, Luz. “Design of Sanitary Sewer Improvements for the City of Valentine”, UTEP, December 2009.

Valdovinos, Belen. “Experimental Interfacial Shear Strength Test and its Application for Pavements in the Paraguayan Chaco Region”, Texas A&M, May 2009.

Buena, Luis. “Construction Management Internship”, UTEP, (December 2011).

Rios-Gaytan, Luis. “Construction Management Software”, UTEP, (December 2011).

14. Senior Undergraduate Projects Supervised

Torres, D, E. Saucedo, N. Mercado, L. Cornejo, L., and E. Varela,. “Multipurpose Vinton Village”, Spring 2011.

Cano, L., C. Gallardo, W. Dorantes, and J. Rios-Gaytan. “Construction Management Tools”, May 2009.

Honors and awards to supervised students

González, Oscar, Recipient of the Transportation Research Board-Dwight David Eisenhower Transportation Fellowship, January 2016.

Vavrova, Marketa, Recipient of the Jerry Shea Award 2014 for her outstanding performance in the International Road Federation Road Scholar Program.

Vavrova, Marketa, 2014 Class President of the IRF Road Scholar Program sponsored by the International Road Federation (IRF).

Vavrova, Marketa, Recipient of the European Friedrich List Award 2012 for the Master thesis "Development of an electronic vehicle miles travelled toll model".

Montes, Edith, Andrew D. Jones Award, UTEP, Spring 2011.

Alejandra Gallegos, 2011 IRF Road Scholar Program sponsored by the International Road Federation (IRF).

Luis Quintana, 2011 IRF Road Scholar Program sponsored by the International Road Federation (IRF).

Alejandra Gallegos, Andrew D. Jones Award, UTEP, Spring 2010.

Membership in Professional Societies

Texas Board of Professional Engineers, P.E. 101970

Peruvian Board of Engineers, P.E. 39748

Leading Role

- American Society of Civil Engineers (ASCE)
Transportation and Development Institute (TDI),
Chair of the International Subcommittee on International Activities (January 2015 – Present).
- Transportation Research Board (TRB)

Pavement Management Systems, AFD10

Chair of the Research Subcommittee

- Texas Society of Professional Engineers (TSPE), Education Committee Past-Vice-Chair, and Advisor at UTEP
- International Society for Maintenance and Rehabilitation of Transport Infrastructures (ISMARTI). Vice President of the North-American Region.
- Chi Epsilon, Advisor at UTEP
- Transportation Leadership Council (TLC), Southern Plains Regional Transportation Center, Advisor at UTEP
- Committee on Implementation of Mechanistic-Empirical Pavement Design (CIDMEP) Chair
- Construction Management Institute
- Ibero-Latin American Asphalt Congress, Delegate in the U.S.
- International Road Federation (IRF)
 - o Coordinator of Alumni Fellowship in Latin-America
 - o Former Chair of the Asset Management International Task Force
 - o Judge for IRF Global Achievement Award (2011- Present)
 - o Member of the Technical Committee for the 17th IRF World Meeting 2013

Committee Membership

In the U.S.

- American Society of Civil Engineers (ASCE)
 - Transportation and Development Institute (TDI)
 - Education Committee
 - FHWA Pavement Management Roadmap Expert Group
- Phi Kappa Phi
- Transportation Research Board (TRB)
 - Pavement Preservation, AHD18
 - Pavement Management Systems, AFD10

International

- Inter-american Cement Federation
- International Society for Maintenance and Rehabilitation of Transport Infrastructures (ISMARTI)
- Peruvian Road Association

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