

COE Dean's Advisory Council
February 24th, 2017
NMSU Golf Course

Civil Engineering Department Report

Presented by:

David V. Jauregui, Ph.D., P.E., Department Head of Civil Engineering, NMSU

Overview

FACULTY AND STAFF

CIVIL ENGINEERING ENROLLMENT

SCHOLARSHIPS AND PROFESSORSHIPS

SALON DISCOVERY EVENT

Department of Civil Engineering: Faculty and Staff

FACULTY

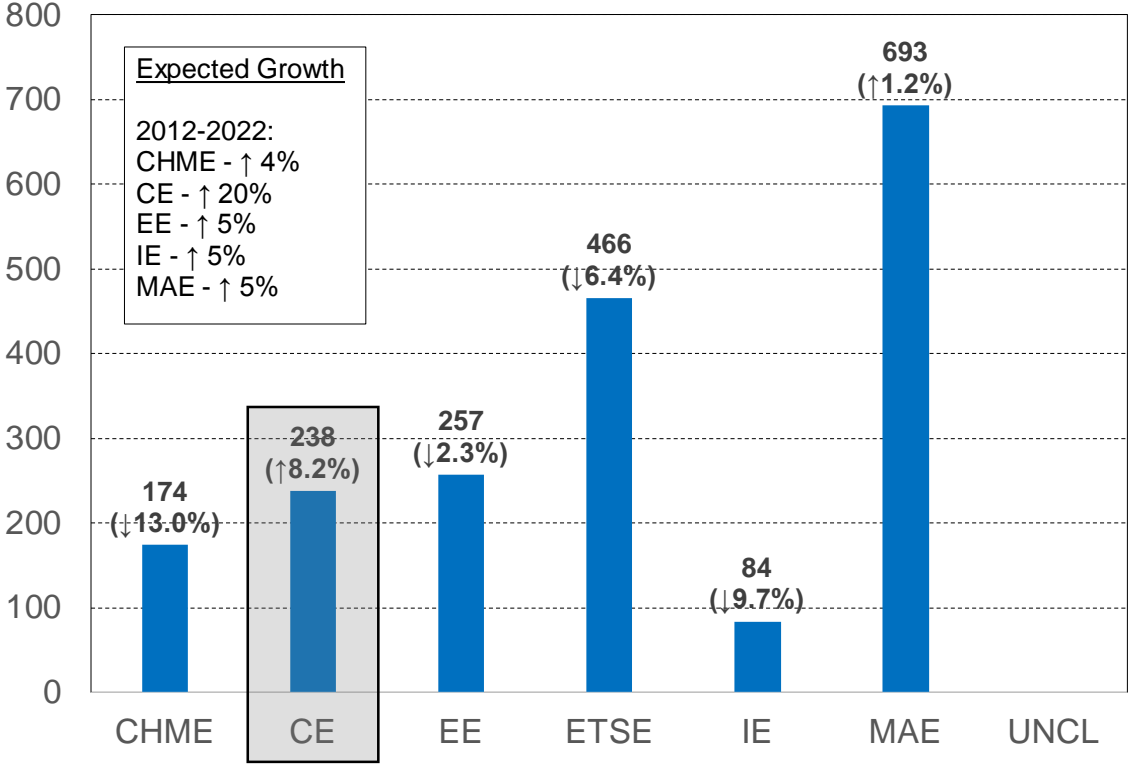
- Environmental – N. Khandan (89'), L. Papelis (10'), P. Xu (13'), Yanyan Zhang (16')
- Geotechnical – P. Bandini (02'), D. Cortes (11')
- Structures – D. Jauregui (99'), C. Newton (01'), T. Ray (14'), B. Weldon (10'), Ehsan Dehghan-Niri (17')
- Transportation – P. Martin (12')
- Water Resources – S. Bawazir (00'), P. King (90'), Z. Samani (87')

STAFF

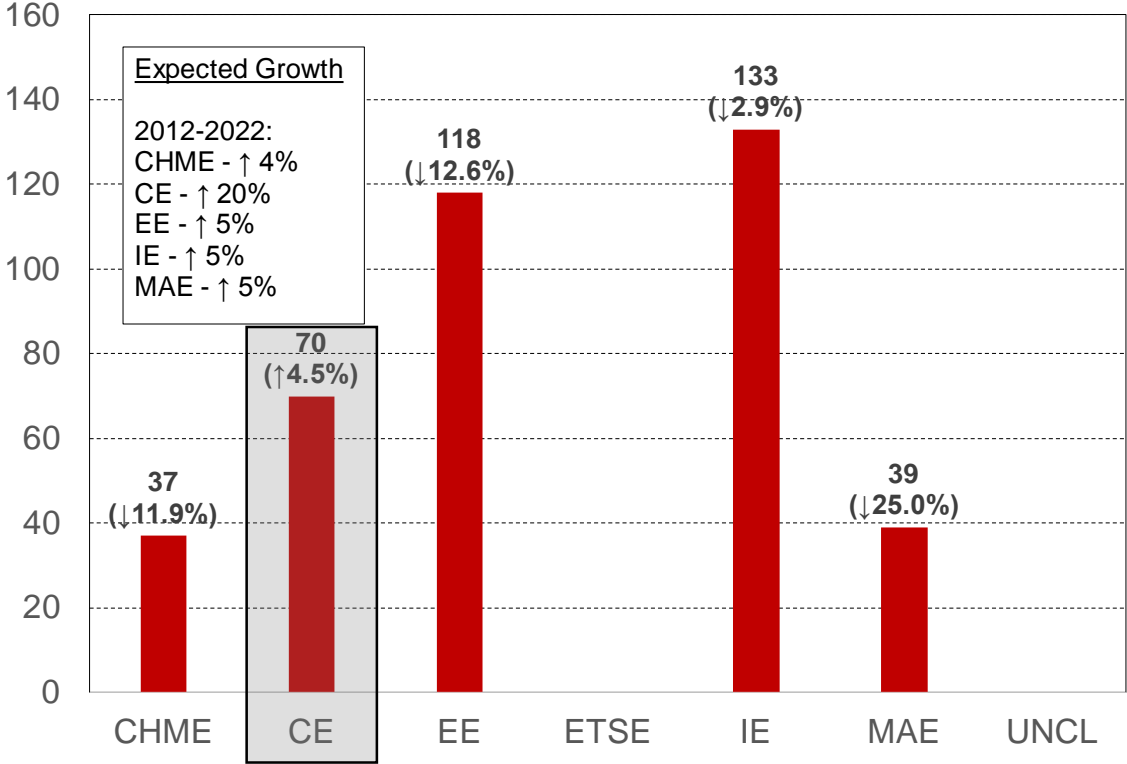
- Admin Assistants – Elvia Cisneros, Margaret Cotsonis, Sherry Woods
- Associate Engineer – Stefan Perez

Quick Facts: Civil Engineering Enrollment

Undergraduate Head Count - COE Fall 2016



Graduate Head Count - COE Fall 2016



New Civil Engineering Scholarships

- Adelmo and Rebecca Archuleta Endowed Scholarship (\$1200/yr)
- Ed and Barbara Foreman Endowed Scholarship (\$8000/yr)
- Dr. Leonard A. Traina Endowed Scholarship (\$1300/yr)
- J. B. Waters Endowed Scholarship (\$9000/yr)
- Kenneth White Endowed Scholarship (\$1000/yr)
- Kiser Endowed Scholarship (\$3000/yr)
- SSMTL Alumni and Friends Current Use Scholarship (~ \$5000)
- ACAGE 25th Anniversary Endowed Scholarship (\$1000/yr)

TOTAL AWARDED SCHOLARSHIPS = \$91k (16'-17')



Civil Engineering Endowed Professorships

Established

- Ed and Harold Foreman Endowed Chair – Dr. Nirmala Khandan
- John Clark Distinguished Professorship – vacant, TBA
- Ed Foreman Distinguished Professorship – Dr. David Jauregui
- Harold Foreman Distinguished Professorship – vacant, TBA
- Wells-Hatch Endowed Professorship – Dr. Paola Bandini

In Process

- Dr. John Minor P.E. Memorial Endowed Professorship – \$125k donated by Dr. Joseph Minor (match from State declined)
- Kenneth White Professorship in Transportation and Structural Engineering – current balance ~ \$100k (started by Dr. John Hernandez)



NMSU Civil Engineering Research

Faculty Expertise – ground stabilization, high performance materials, intelligent transportation systems, remote sensing, renewable energy, resilient infrastructure, structural health monitoring, sustainable construction, traffic modeling & simulation, and water conservation

Provost's Post on Feb 9, 2017 on "Signature Programs" mentioned [Sustainable Agriculture](#), [Energy](#), [STEM Education](#), [Water Resources and Research](#), and [Critical Infrastructure](#))

ASCE #GameChangers: Engineering Innovation

- Transportation and Freight – Rapid Bridge Replacement, Accelerated Bridge Construction, Next Generation Pavements, Robotic Bridge Inspection Tools, Technology Monitored Asset Health
- Water and Energy – Desalinated Water, Extracting Energy from Waste, Going Underground, Recycled & Reclaimed Water, Integrating Renewables into Equation

Salon Discovery: Enchantment for the Mind



NMSU Civil Engineering: En Route to Better Infrastructure

Discover the future of civil engineering and enjoy the acclaimed music of La Catrina Quartet at Salon Discovery's fall gala event, "NMSU Civil Engineering: En Route to Better Infrastructure."

- Learn how civil engineers continue to improve our lives as NMSU faculty members Paola Bandini and Phil King talk to KRWG's Fred Martino. (Listen to KRWG's recent interview with Bandini and King.)
- Listen to NMSU's own Latin Grammy Award-winning La Catrina Quartet.
- Join us for gelato and other light refreshments an after-party on the Horseshoe immediately following.

#NMSUSalonDiscovery

<https://www.youtube.com/watch?v=aFbjpxdXffM>



September 9, 2016
7:30 pm
NMSU's Atkinson Recital Hall

Engineering Research Center for Bio-Mediated and Bio-Inspired Geotechnics (CBBG)

- University Partners – ASU (lead), NMSU, UC Davis, Georgia Institute of Technology (Georgia Tech)
- Funded by the National Science Foundation
- Center Goal – develop and implement into practice nature-inspired sustainable solutions to geotechnical engineering and infrastructure problems in four research thrust areas:
 - ✓ Thrust 1: Environmental Protection and Restoration
 - ✓ Thrust 2: Hazard Mitigation
 - ✓ Thrust 3: Infrastructure Construction (Grant PI and Thrust Leader: Dr. Paola Bandini, NMSU)
 - ✓ Thrust 4: Resource Recovery



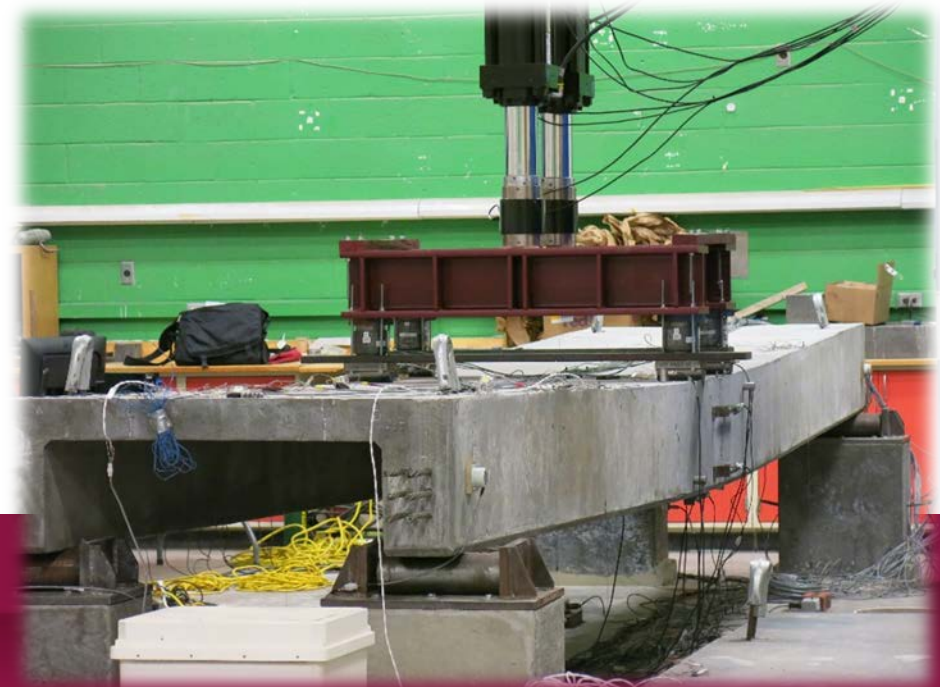
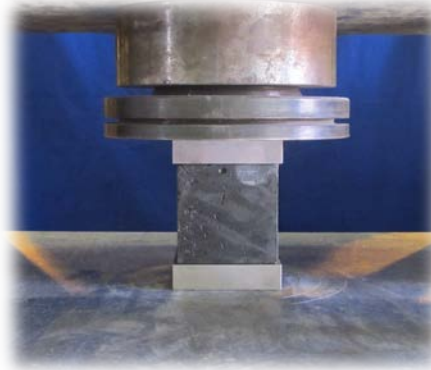
Re-inventing the Nation's Urban Water Infrastructure (ReNUWIt)

- University Partners – Stanford (lead), UC Berkeley, CO School of Mines, NMSU
- Center Goal – R&D for improving sustainability and resilience of ageing urban water infrastructure. Validating research at testbed level. Three center-wide thrust areas:
 - ✓ Efficient Engineering Systems (Grant PI and Thrust Lead: Dr. Nirmala Khandan, NMSU)
 - ✓ Natural Water Infrastructure Systems (Thrust lead: Stanford)
 - ✓ Urban Water Systems and Institutions (Thrust Lead: UC Berkeley)
- NMSU Focus Areas
 - ✓ Develop/test water reuse and decentralized technologies for urban systems
 - ✓ Restore riparian systems to protect/improve riverine water quality/quantity
 - ✓ Recover energy, fertilizers, and potable water from urban wastewater



Transportation Consortium of South-Central States (Tran-SET)

- University Partners – LSU (lead), Arkansas State Univ, Baton Rouge Community College, Navajo Technical Univ, NMSU, Oklahoma State Univ, Prairie View A&M Univ, Texas A&M Univ, University of New Mexico, University of Texas at Arlington, and University of Texas at San Antonio
- Center Goal – improving the durability and extending the life of transportation infrastructure, preserving the environment and the existing transportation system (Grant PI: Dr. Craig Newtonson and Grant Co-PI: Dr. Paola Bandini)
- NMSU Focus Areas – concrete materials, durability and geotechnical engineering



Thank You!!!!

