

MINUTES

MEETING OF THE NEW MEXICO BOARD OF
LICENSURE FOR PROFESSIONAL ENGINEERS
AND PROFESSIONAL SURVEYORS held at 9:00 a.m.,
Friday, November 8, 2019, Conference Room,
Substation of the New Mexico State Police
4615 Hawkins St., NE, Albuquerque, NM

Members Present – Paul Brasher, PE, Board Chair
Ron Bohannon, PE
Augusta Meyers, Public Member
Walter Gerstle, PhD, PE
Karl Tonander, PE
Julie Samora, PE
Cliff Spirock, PS

Members Absent – Glen Thurow, PS, Board Vice-Chair
David Cooper, PS

Others Present – Perry Valdez, Executive Director
Annette Thompson-Martinez, Deputy Director
Miguel Lozano, Legal Counsel

1. **Convene, Roll Call and Introduction of Audience**

Mr. Brasher convened the meeting at 9:19 a.m., roll call was taken and a quorum noted.

2. **Meeting Notification**

Mr. Valdez informed the Board the meeting was noticed in the Albuquerque Journal as well as the Board's website.

3. **Approval of Agenda**

MOTION by Mr. Bohannon to approve the agenda as a continuance of the Full Board Meeting from yesterday with the removal of item nine on the working agenda since it has already been discussed in the Full Board Meeting and allowing a discussion of item four once Superintendent Salazar is present, **SECOND** by Mr. Tonander, **PASSED** unanimously.

4. **Flood Plain Management**

- a. Flood Plane Management – RLD Superintendent M. Salazar
This item was postponed until a later meeting.

5. NOAA/NGS Proposed 2022 Geospatial Datum changes, State Plane Coordinate System changes (NMSP2022) and what does it mean for engineers – Presentation by Mr. Spirock

Mr. Spirock presented information to the Board regarding the proposed Geospatial Datum changes. Mr. Spirock explained the differences in current datums used and the proposed changes initiated by NOAA and NGS.

He informed the Board that changes to International feet and the new vertical datum will impact every bench mark being used that is published and references the state plane values.

Mr. Spirock explained the difference between a projection and a datum and stated there are horizontal reference datum's which indicates where you would stand to look at a flat plane or a calculated surface like a geoid. He stated calculations are based on where you stand and he provided an examples of geodetic coordinates. He further explained the difference of the center of the earth and the center of the earth's mass. The newer calculations are based on gravity and the center of the Geoid's mass. The variety of reference frames previously known as datums will now be called Reference Frames. The new horizontal datum will be called NATRF2022 and the new datum for vertical will be NAPGD2022.

He explained the changes on the maps being used. He expressed the importance of the history used in bench mark control sheets. For engineers he suggested:

- training for all CAD operators and recommends checking the software being utilized,
- engineers requiring metadata from the client or surveyor since this will become critical,
- making everyone aware of the changes and ensure all software being used is current,
- that the equipment used has the correct upgrades to ensure the calculations are accurate,
- include control data in a longitude and latitude format
- avoid software that has not incorporated the datum changes
- surveyors should publish the basic foot units used.

Mr. Spirock stated there is a distortion of the planes that can be measured from the ground versus sea level (the ellipsoid). He explained the ground grid factor and informed the Board this is what is driving the proposed State Plane 2022 changes to get

the ground to grid factor to zero. He stated there will be multiple new State Plane “zones” to deal with and it will be up to the individual States to incorporate in their laws.

Mr. Spirock offered suggestions to the individuals on the drafting board:

- to always have one control monument that has a geodetic reference if possible,
- publish the data for the reference control (metadata),
- identify if using the US standard foot or the international foot,
- importing data in a longitude and latitude format.

He informed the Board of some costs associated with updating the software used by industry surveying and engineering firms.

Mr. Brasher expressed his concerns of possible lawsuits regarding these changes.

Mr. Spirock expressed concern for the Board regarding these changes and how the law will be defined, regarding NMSA Property Law.

Mr. Bohannon also questioned how the responsible party will be determined on the errors that take place.

Mr. Spirock stated the coordinates will change every five years. He said Tectonic Plates will be moving and new NGS data sheets will be publishing velocities.

Dr. Gerstle clarified that is calculating on a deforming rigid body which has to do with gravity.

Mr. Spirock explained the US Standard foot and how it will be standardized.

Mr. Bohannon thanked Mr. Spirock for the presentation and stated there are many issues of concern to include the potential required changes to the act.

Mr. Spirock stated NMSP2022 version is extremely confusing and suggested receiving guidance from NCEES as to how other states will be dealing with these changes. He noted federal projects will be affected by the incorporation of these changes.

Mr. Bohannan suggested an explanation of how this will affect the day to day operations is going to be necessary when presented.

Mr. Bohannan expressed since everything is headed towards design build, this could create some huge problems. Mr. Spirock discussed monuments and the maintenance of them without the proper information. He also discussed the possible options for the proposed 2022 changes.

Mr. Bohannan suggested a white paper to be drafted to alert individuals that these changing are upcoming. He said the industry needs to take the lead and stated he does not think it is the Board's responsibility at this point and time. He stated a five-year plan with the first step being education is a suggestion for the Rules Committee.

Ms. Meyers suggested tailoring the one page to specific audiences. She also suggested a timeline may be developed in the Public Information Committee.

Mr. Bohannan recommended the five-year plan be charged to the Rules Committee and should include education, evaluation and recommendations.

6. Scholarship Program Setup

Mrs. Thompson-Martinez informed the Board additional information was received at the end of the day on Wednesday November 6, 2019 from the Universities and provided each member the data received. She also stated a meeting did take place with the DFA and LFC Analyst to discuss the process for the disbursement of the scholarship monies. The discussion with the analysts expressed the urgency to get the monies disbursed in an efficient and effective manner. Additional research is currently in process at DFA to find out if this will be done by an operating transfer or if a Budget Adjustment Request will need to be prepared.

Mr. Valdez informed the Board the demographic information was requested based on a request from Mr. Thurow to assist in the decision process.

The Board reviewed the information received from the Universities and discussed the disbursement and the intent of the scholarship initiative.

Mr. Brasher suggested the amounts be allocated to allow \$30,000 to surveying and \$70,000 to Engineering.

Mr. Spirock expressed his suggestion to allow additional funds to be allocated to CNM to provide additional pathways. Mr. Brasher inquired if CNM had a Survey program and expressed his concern on how it would be determined they would be directed towards a curriculum.

Mr. Spirock stated CNM had an associate's degree previously but the monies would be used for the individuals who are interested in obtaining a related science pathway and meeting the 18 core curriculum hours in surveying as specified in the rules.

Mr. Spirock expressed he would like to see the money be used for other alternative pathways for licensure with blended programs.

Dr. Gerstle stated the money could go directly to the NM Engineering foundation for disbursement.

Mr. Brasher stated the money would have to be transferred to another state agency.

Ms. Thompson-Martinez clarified the information received from the Analysts indicated the money would be done by an operating transfer to another state agency. She stated that our DFA Analyst, Cynthia Montoya, was also going to speak with the CAFER Analyst to ensure the disbursement process was done correctly. Ms. Thompson-Martinez also clarified the foundations we spoke with were a 501 3c organization and not a state agency.

Mr. Spirock explained he created talking points along with the disbursement points which referenced the Higher Education Department.

Mrs. Thompson-Martinez informed the Board clarification was requested to verify if the fund could grow and allow additional donations to be received. She also stated the Analysts would research with the CAFER Analyst on these questions but did indicate the language is clear the amount to disburse is a restrictive amount of \$100,000 and would need to be changed legislatively if the amount to be disbursed needs to increase.

Mrs. Thompson-Martinez went over the data received from the Universities and the enrollment number.

Mr. Tonander stated the enrollment numbers are not something he is concerned with and stated the focus should be on professional licensure. He recommended the focus be on the FE examination participation and use those numbers for disbursement.

Dr. Gerstle stated the civil engineering department and it is the only department that requires the students to take the FE examination. He stated it is a possibility the mechanical department requires the FE to be taken. He suggested a requirement could be made as part of the scholarship that the FE be taken by the recipient of the scholarship.

The Board discussed requirements and the amounts to be allocated at length.

Mr. Spirock asked if there is a specific time frame the Universities had for the monies to be granted to the applicants.

Mrs. Thompson-Martinez-Martinez explained the monies will need to be disbursed as soon as possible since the amount is budgeted for this fiscal year. She stated she was not sure if the Universities would have a certain amount of time to award the monies.

Dr. Gerstle recommended the requirements not be developed with too much stringency.

Mr. Spirock strongly recommended a portion be awarded to CNM for the alternate path towards licensure.

Mr. Lozano questioned if the program is blended, how will ensured the individual will pursue the path of licensure.

Mr. Spirock stated the forms for soliciting applicants would need to indicate the interest in pursuing licensure as a Surveyor. He stated the talking points created were done based on a request by Mr. Bohannon.

Mr. Tonander addressed the same concern regarding individuals who state on paper on the interest to receive the scholarship but do not pursue the path of licensure as a surveyor.

Mr. Spirock stated this would be done in the previse of awarding the scholarship monies to the individual.

Mr. Tonander expressed concern of individuals deviating from the original intent since there is not a program established.

Mr. Valdez read aloud the language in the Statute pertaining to the requirement to pursue licensure and practice in New Mexico.

Dr. Gerstle stated the Board cannot force someone to practice in New Mexico. He also suggested some type of assistance to candidates who are eligible to sit for the FE examination.

Mrs. Thompson-Martinez asked for clarification on the language which references qualified Universities and is not clear what the intent of the language was when using the word qualified.

Mr. Bohannon stated the process should not be complicated and the transfer not to be difficult. He also stated those that are promoting licensure should be a factor.

Mr. Spirock expressed concern of monies being used for surveying candidates at the Universities which are only accredited by ABET.

Mr. Bohannon suggested five thousand be allocated to CNM for the alternative pathway toward Surveying licensure.

Mr. Spirock stated he would like to see more of an even distribution given to CNM and NMSU for Surveying scholarships.

The Board discussed the disbursements amount at length.

Mr. Bohannon recommended the following disbursements be considered by the Board.

UNM: \$23,333

NMSU: \$15,000 Surveying/Geomatics program \$23,333 Engineering program

NMTECH: \$23,333 Engineering program

CNM: \$15,000 Surveying

Mr. Bohannon stated \$70,000 allocated to Engineers and \$30,000 to Surveyors is a fair allocation based on revenue factors.

Mrs. Thompson-Martinez inquired with the board as to what qualifications would go along with the disbursement amounts.

Mr. Brasher stated the monies should be disbursed directly to the Universities.

MOTION by Mr. Bohannon to split the \$100,000 scholarship to approve \$30,000 to be split by Central New Mexico University and New Mexico State University for the Surveying scholarship programs, \$70,000 to be split by University of New Mexico, New Mexico State University and New Mexico Institute of Mining and Technology for Engineering Programs, along with directing Staff to present a list of qualifications to the Board for review on specifics to the scholarship funds, **SECOND** by Mr. Tonander, **PASSED** unanimously.

Mrs. Thompson-Martinez stated she would like approval to share the draft requirements with a few of the members for guidance before bringing them back to the Board for review and approval. She also stated she wants to encompass all of the requirements of importance for this initiative.

7. **Board Member Responsibilities by Mr. Lozano, AGA, Board Legal Counsel**

Mr. Lozano gave a presentation to the Board an overview of material regarding the Open Meetings Act, Uniform Licensing Act (ULA) requirements.

The Board engaged in questions pertaining to agenda items and notice requirements.

Mr. Lozano explained closed session matters and provided examples. He informed the Board all agenda items need to be specific. He provided guidance on IPRA's and stated he is happy to provide additional guidance since there will be case by case scenarios that will arise in the future. He also gave an overview of the Governmental Code of Conduct.

MOTION by Mr. Bohannon to table the remaining items for the January meeting and adjourn the meeting, **SECOND** by Mr. Tonander, **PASSED** unanimously.

The following items were tabled:

8. **Board Member code of Conduct**

9. Review of Board Sub-Committees

- a. Executive Committee
- b. Joint Practice Committee
- c. Public Information, Exam and Licensure Promotion Committee
 - 1) Meeting Report
 - 2) Newsletter –
 - 3) Licensure Brochure –
 - 4) Presentations – Status Report
- d. Rules and Regulations Committee
- e. Legal Enforcement Committee
- f. NCEES Committee Members

10. Review of Application Forms

11. Strategic Planning/Strategic Plan

12. Future Goals and Strategies

13. Review of Engineer/Surveyor of Record Forms

- a. Question regarding Engineer/Surveyor of Record being a Full Time Employee or on Contract
- b. Advisory Opinion on Affidavits

14. Adjourn

The meeting adjourned at 12:54 pm

Submitted by:

s/Annette Thompson-Martinez
Annette Thompson-Martinez, Deputy Director

Approved by:

s/ Paul Brasher
Paul Brasher, Board Chair

February 14, 2020 **Approved Date**