

Dear Professional Engineers in California Government,

My name is Leila Lomas Nafarrete and I am in the 7th grade at Blair Middle School in Pasadena. I am honored to have been awarded third place in the middle school category for research engineering, as well as, the Marilyn Jorgensen-Reece Award for Excellence. It is a privilege to be recognized and receive this award given in the memory of a trailblazer -- the first woman to be licensed as a civil engineer by the state of California. As she built the freeway interchange, she built a pathway for women and girls to enter the field of engineering.

I appreciate the opportunity to participate in the 70th Annual Los Angeles County Science Fair and the commitment of the organizers in light of the pandemic. This event encourages young people to explore the sciences. Today, it is imperative that we recognize the importance of science and technology because it will undoubtedly shape the future -- our economy, our health, and the environment. Youth should be encouraged to explore, question, and analyze through the scientific method. The science fair presented an amazing opportunity for me to be creative and learn through experimentation.

I aspire to be an engineer. The recognition that I have received from the Professional Engineers in California Government has encouraged me to continue to pursue this goal. My interest in civil engineering inspired me to design a project to compare two bridge structures -- cable-stayed and suspension. The experiment was intended to test how and how well the different structures responded under seismic pressure. I constructed a seismic activity simulator and two bridge models, using available materials.

After several tests, I found that both bridge models survived under increasing seismic pressure, but slight differences were discernible under intense vibration. Ultimately, the experiment showed the near perfection of these designs hundreds of years in the making.

The opportunity to share what I learned and discuss my experiment with professional engineers during the interview process made this a memorable and invaluable experience, for which I am thankful.

To bring my letter to a close, I would like to thank the Professional Engineers in California Government for their commitment to supporting young scientists, like me. Also, I would like to acknowledge my parents, especially my father, for his support, patience, and all of those trips to the hardware store. Finally, I would like to thank my science teacher Mr. Chau for encouraging and inspiring me. This experience and your recognition push me to strive, thrive, and pursue my dream of becoming an engineer.

Sincerely,

Leila Lomas Nafarrete