OPENING STATEMENT Ranking Member Ami Bera (D-CA) of the Subcommittee on Space

House Committee on Science, Space, and Technology Subcommittee on Research and Technology Subcommittee on Space "The Great American Eclipse: To Totality and Beyond" September 28, 2017

Thank you to Chairwoman Comstock and Chairman Babin for holding this Joint Hearing on "*The Great American Eclipse: To Totality and Beyond*", and I want to welcome our witnesses for being here this morning. On August 21st, millions of Americans were treated to the rare sight of the Moon completely blocking the Sun—a total solar eclipse. Those Americans who were not in the path of totality saw a partial solar eclipse.

I had the opportunity to view the partial eclipse back in California at the Powerhouse Science Center in Sacramento. Surrounded by hundreds of enthusiastic adults and children, this experience reminded me of my childhood in Southern California watching the Apollo missions with the same amazement.

Preliminary estimates indicate that over 200 million Americans participated in a similar viewing event or watched live-streamed media coverage. It's critical that we learn from this experience and work to keep this level of public interest in space and science as future space activities can only benefit from an engaged and supportive American public. Children who experienced this eclipse may one day be part of the teams of scientists and engineers supporting missions that take us to cislunar space, Mars and beyond.

Although a total solar eclipse occurs somewhere on Earth every 18 months, the Great American Eclipse was extraordinary because, for the first time in a century, the path of totality passed across the United States eastward from Oregon and eastward to South Carolina. Those who experienced the total solar eclipse saw the Moon completely cover the bright disk of the Sun, revealing the much fainter corona and solar prominences. They also may have noticed changes in their environment—stars and planets in the mid-day sky, a decrease in air temperature, and changes in bird and animal behaviors.

Scientists used the occurrence to study the innermost region of the Sun's corona, which would otherwise not be visible even with dedicated solar probes and ground-based telescopes. Mr. Chairman, this level of participation from the American public would not have been possible without the planning of multiple Federal agencies and organizations, including the Department of Transportation, which helped ensure the safety of road travel for the many Americans that drove long distances to be in the path of totality.

While the total solar eclipse lasted only a few minutes at each point along its path, the amount of information we can learn about the public engagement in this event will have long-lasting value for science and science education.

To that end, I look forward to hearing from our witnesses on:

- What did we learn about the logistical, informational, and science planning of this event?
- What aspects of the preparations had the greatest impact in engaging the public?, and
- What lessons were learned from the Great American Eclipse that can be applied to encourage maximum public participation in other future science events?

Thank you, Mr. Chairman, and I yield back.