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- Planetary Defense – Recent Progress & Plans
- NEO Discovery
- NEO Characterization
- Mitigation Techniques & Missions
- Impact Effects that Inform Warning, Mitigation & Costs
- Consequence Management & Education

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INTERNATIONAL NEO EDUCATION AND PUBLIC OUTREACH

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ABSTRACT

Diverting a threatening comet or asteroid is a task for the technologically advanced, developed nations of the world. But in the case of an impact, should mitigation fail or start too late, any region on Earth can be adversely affected. Historical records and current research show this global impact distribution. If the 1908 Tunguska airburst had hit a populated region it would have caused immense casualties and destruction. Due to the global vulnerability, recovery planning for impact by a Near Earth Object (NEO) should be worldwide. Most societies are dependent on electricity and space-based technologies. Preparations to restore these services should be in place before a disaster occurs. These preparations would be useful also in case of regional disasters such as more likely smaller NEO impacts, earthquakes, tsunamis, volcanic eruptions or epidemics. To raise global preparedness for the threat of NEOs, people and governments, especially in developing nations, must become more aware than they are now of planetary defense. Global organizations are therefore compelled to conduct Education and Public Outreach (EPO) relating to planetary defense worldwide. In this paper we describe and advocate EPO efforts that could be implemented at low or no added cost in existing EPO programs. We focus on three institutions already active in the field of space applications for EPO; namely, The Planetary Society, the Space Generation Advisory Council and the International Space University. All have global membership, skills and resources appropriate to the tasks of increasing public understanding, awareness and action to

recover from regional disasters. TPS has several projects for discovering, characterizing and diverting threatening objects plus several related public outreach activities. SGAC supports the UN's Committee on the Peaceful Uses of Outer Space (COPUOS) with outreach as well as communications and policy studies. ISU students have carried out a variety of team projects on relevant topics, and ISU alumni are active as space advocates in more than 100 countries. For this paper we intend to draw upon the assets of all three organizations, compiling practical ideas for extending public involvement in planetary defense.