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**[ ]  Deflection and Disruption Models & Testing**

**[ ]  Mission & Campaign Designs**

**[ ]  Impact Consequences**

**[ ]  Disaster Response**

**[x]  Decision to Act**

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**PLANETARY DEFENSE AS ENTREPRENEURIAL POLITICS: THE CASE FOR POLICY OPTIMIZATION**

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##### ABSTRACT

In addition to the technological, methodological, and legal considerations of planetary defense, there remains a major political consideration that should be addressed in order to maximize the effectiveness of national and international efforts. The nature of the near-Earth object hazard, with a variable timeframe and threat characteristics, in combination with terrestrial uncertainties, such as administrative turnover and international relations concerns, highlight the utility of achieving planetary defense capabilities earlier to minimize mission risks. However, the pursuit of this capability is stymied by the features of planetary defense as a public policy. On the Wilson-Lowi matrix of public policy, planetary defense occupies the unenviable position of “entrepreneurial politics”. The costs of achieving planetary defense capacities and the actual conduct of a deflection campaign would likely concentrate onto the initial developer, while the benefits of a defensive umbrella would disperse broadly; potentially globally. As such, potential sponsors may be actively disincentivized from serving as the “first mover”, especially due to the risk of free-riding. If would-be sponsors of planetary defense fear that they alone will pay for the security of others outside their jurisdictions, they may limit the scope of their potential investments, and thus distancing the opportunity to attain satisfactory mission readiness earlier. Therefore, a programmatic proposal for pursuing planetary defense may seek to include evaluation of how to accrue interest, despite dispersed costs, and assuage concerns over concentrated costs. This paper discusses the reconceptualization of planetary defense as an entrepreneurial public policy and practical options for policy improvements.

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