New Ways: Tiltrotor Aircraft and Magnetically Levitated Vehicles

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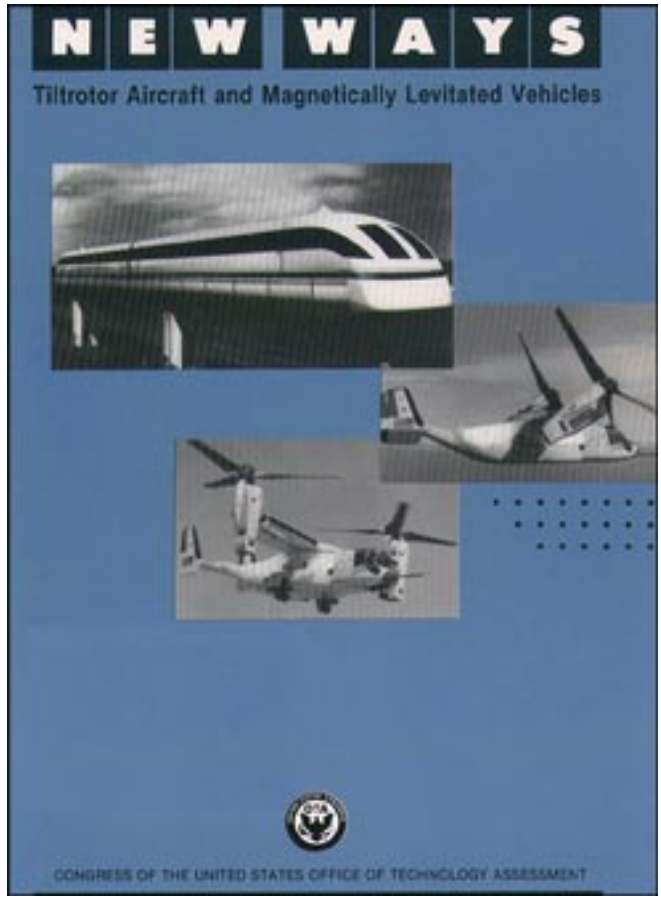

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Foreword

Flying on a commercial jet is now the fastest way for the public to travel between most cities in the United States. But travelers spend much of their trip time getting to or from the airport, at the terminal, or in the airplane while it sits on the ground. Magnetically levitated (maglev) vehicles and tiltrotor aircraft are among the new and distinctly different technologies that have been proposed to help travelers go from origin to destination quicker than conventional airlines or Amtrak, on trips up to about 500 miles.

In recent years, Congress has supported both military tiltrotor development and research into maglev technologies, although budget constraints have threatened this funding each year. At the request of the House Committee on Appropriations, OTA assessed what is currently known about tiltrotor and maglev, and what roles these and other advanced technologies could play in improving intercity transportation. The late Senator John Heinz had also asked OTA to study the construction costs of various high-speed rail and maglev systems.

Common issues for these systems include their possible contributions to improving mobility in congested corridors, U.S. technology leadership, the Federal role in transportation research and development, and institutional and community barriers to major, new infrastructure programs. Moreover, some Federal financing is likely to be required if commercial maglev or tiltrotor technologies are to be developed by U.S. industry over the next decade.

Congress will need to clarify its objectives for supporting or encouraging these technologies before it can make wise decisions on when or whether to undertake substantial, long-term Federal programs in support of either or both of them. This report identifies several funding and management options for consideration if such goals are established.

OTA thanks the many government, industry, and citizen participants who contributed generously to this study through workshop panels, interviews, reviews, and other means of sharing their knowledge and experience with us. Their participation does not necessarily represent endorsement of the contents of the report, for which OTA bears sole responsibility.

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