

National Aeronautics and
Space Administration
Ames Research Center
Moffett Field, CA 94035-1000

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February 25, 2009

Reply to Attn of: Mail stop 202A-3

TO: James D. Boyd, Vice Chair and Presiding Member
Karen Douglas, Commissioner and Associate Member
Transportation Committee, California Energy Commission

FROM: Jeffrey Smith, Deputy Chief, Entrepreneurial Initiatives Division, Ames
Research Center

SUBJECT: Letter of Intent for Collaboration Between NASA Ames and Unimodal
Systems, LLC

The NASA Research Park (NRP) at Ames Research Center, Moffett Field, CA, was established by the Agency to bring industry partners from high-tech sectors into close proximity with NASA R&D to build successful public/private partnerships. Unimodal Systems LLC is one of those NRP partners and our Ames Entrepreneurial Initiatives Division, is very pleased to be discussing further public/private partnership work that is of mutual benefit to NASA and Unimodal. NASA's Strategic Plan calls for:

"Development of portions of NASA's technology and capability portfolio by partnering with...the commercial, academic, and other external sectors...to expand the Agency's ability to identify new technologies and new technology sources...and gain access to a wider variety of technologies than the Agency could develop in-house."

Additionally, the National Aeronautics and Space Act (Pub. L. No. 85-568, 72 Stat. 426, Section 102:e) provides guidance for NASA expertise to be applied to ground-based transportation solutions:

"The Congress declares that the general welfare of the United States requires that the unique competence in scientific and engineering systems of the National Aeronautics and Space Administration also be directed toward ground propulsion systems research and development. Such development shall be conducted so as to contribute to the objectives of developing energy- and petroleum-conserving ground propulsion systems, and of minimizing the environmental degradation caused by such systems."

Pursuant to these directives, we are exploring many relevant areas of potential collaboration and technology transfer between NASA and Unimodal Systems LLC, including:

1. Advanced, materials research and nanotechnology applications.
2. Computational aerodynamics simulation.
3. Wind tunnel test/evaluation of aerodynamics of ground/air/space vehicles.
4. Computer simulation of large-scale, autonomously-controlled, transportation systems with parallels to the next generation airspace management systems.
5. Human/machine performance characteristics of usability, safety and acceptance.

These collaborations can leverage unique NASA capabilities to provide a jump-start to high-impact transportation technologies like the SkyTran personal rapid transit system being developed by Unimodal Systems LLC. The SkyTran PRT has the potential to reduce greenhouse gas emissions and congestion through development and deployment of their alternative transportation technology. With our NASA history in developing and executing first-ever, complex engineering feats, we bring unique skills, expertise and capabilities to our public/private partnerships. Furthermore, as we are located in the heart of Silicon Valley and its high-tech sector, further opportunities for beneficial technology partnerships and cooperation are facilitated.

Sincerely,

A handwritten signature in black ink, appearing to read 'JDS', with a long, sweeping horizontal line extending to the right.

Jeffrey D. Smith