



NASA's Impact in Oregon: A Tech Transfer Perspective

You know that NASA studies our planet, our sun, the solar system, and the Universe.
But did you know about the space program's economic impact here on Earth?



In 2011, NASA invested over **\$9 million** in the state of Oregon.

Since 2001, NASA's SBIR/STTR Program has invested nearly
\$15 million in **14 Oregon companies**
and more than **\$1.2 billion** nationwide.

How NASA's SBIR/STTR Program Benefits Oregon

NASA is committed to moving technologies and innovations into the mainstream of the U.S. economy, and the Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) program helps fulfill this goal.

SBIR/STTR stimulates technological innovation by encouraging small, high-tech companies—particularly minority and disadvantaged businesses—to partner with NASA to help meet its research and development needs in key technology areas. At the same time, this program strengthens small companies by enabling them to bring cutting-edge new products into the U.S. economy.

The list to the right highlights Oregon businesses that received SBIR/STTR contracts from NASA since 2001. (Visit <http://sbir.nasa.gov> for more information on the SBIR/STTR program.)

NASA SBIR/STTR Companies in Oregon

bart-massey.com LLC	Lake Oswego
e beam, inc.	Beaverton
Galois, Inc.	Portland
GSSL, Inc.	Tillamook
Hood Technology Corporation	Hood River
LightSmyth Technologies	Eugene
Lynguent, Inc.	Portland
MicroEnergy Technologies, Inc.	Portland
Opti-MS Corporation	Portland
Peregrine Power, LLC	Wilsonville
The Innovation Laboratory, Inc.	Portland
UMPQUA Research Company	Myrtle Creek
Voxel, Inc.	Beaverton
Western Environmental Technology Laboratories.....	Philomath

oregon





NASA Spinoff Helps Assess and Treat Balance Disorders (Clackamas)

NASA's pioneering research on balance assessment and rehabilitation of astronauts as they readjust to Earth's gravity is now helping treat millions of individuals with balance disorders. Using NASA technology, NeuroCom (a division of Natus) has become a leader in developing computerized tools for the assessment and rehabilitation of balance and mobility disorders. The company has over 2,000 systems in use around the world in a variety of fields, including neurology, geriatrics, orthopedics, and sports medicine.



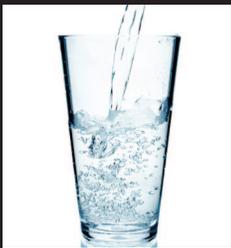
Star-Mapping Tools Enable Tracking of Endangered Animals (Portland)

Pattern-matching software developed by NASA for mapping stars in the universe is now being used to track endangered animals. Using NASA's technology, software developer Jason Holmberg built a database that identifies and tracks unique markers in animals. The data helps researchers learn more about the life histories and migration patterns of elusive animals and monitor the status of threatened populations.



A Match Made in Space (Portland)

To help manage space shuttle systems, NASA developed "intelligent agent" reasoning and control software capable of making decisions through a human-like power of reasoning. The software was used by weAttract.com, an online matchmaking company, to help clients build a psychological model of their ideal partner. Match.com, the leading online dating site, also used the weAttract.com software for its personality matching program.



Pure Water From a Pure Genius (Bend)

NASA partnered with UMPQUA Research Company (URC), a chemical and microbiological testing laboratory, to help purify the nation's drinking water. The URC system successfully removes perchlorate concentrations from water having as many as 1,500 parts per billion (ppb) to less than 4 ppb, a non-detectable level. Once a research and development contractor for NASA's manned spaceflight applications, URC has evolved into a leader in water purification and analysis.



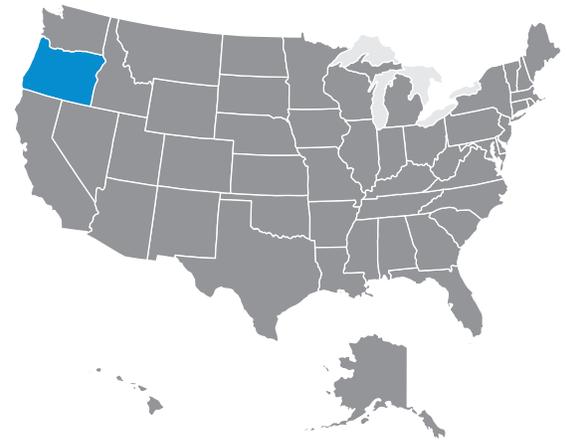
NASA's Joystick Is Out of This World (Hillsboro)

NASA engineers and pilots helped a team of developers at Thrustmaster, Inc. (now part of Guillemot Corporation) develop computer game joysticks based on space shuttle flight controllers. Thrustmaster marketed its Millennium joystick and has become a leading manufacturer of gaming products. Thrustmaster returned the favor to NASA by developing a reproduction of the space shuttle's rotational hand controller to help astronauts with training and onboard simulations.



NASA Spinoff Helps Create Cleaner Landfills (Corvallis)

Through NASA funding, Osmotek, Inc. partnered with NASA to deliver a lightweight, efficient water purification system for use aboard the International Space Station. The company was able to incorporate this technology into its commercial direct osmosis water treatment system. Osmotek also adapted the osmosis technique to help landfills control toxic chemicals and eliminate water supply contamination.



NASA actively seeks partnerships with U.S. companies that can license NASA innovations and create "spinoffs" in areas such as health and medicine, consumer goods, transportation, renewable energy, and manufacturing. When businesses leverage NASA technologies to develop new products, it not only benefits the regional economy, but significantly strengthens the nation's competitiveness in the global marketplace.

NASA's centers across the country have helped 34 Oregon companies develop revolutionary spinoff technologies.

Learn more about how NASA innovations benefit the public in *Spinoff*, an annual publication that highlights NASA's most significant technology transfer successes. (Available at: <http://www.sti.nasa.gov/tto>)

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