

# High-Tech Innovation by District

Technological innovation shapes every state and region of the country. Here is how it looks in Virginia's 5<sup>th</sup> congressional district.



VA-5

## High-Tech Goods and Services



	VA-5	Median U.S. District	Economically Similar Districts
High-tech manufacturing exports	\$534M	\$598M	\$743M
High-tech share of all manufacturing exports	37.3%	25.5%	24.7%
IT services exports	\$19M	\$35M	\$32M
IT share of all services exports	2.3%	3.1%	3.1%
Royalty and license services exports	\$84M	\$142M	\$158M
Royalty and license share of all services exports	10.3%	13.3%	15.1%

## Skilled Workforce



	VA-5	Median U.S. District	Economically Similar Districts
High-tech sector workers	16,346	23,683	23,325
High-tech share of total workforce	5.0%	6.9%	7.2%
STEM workers	16,004	16,045	14,063
STEM share of total workforce	4.9%	4.7%	4.3%
Computer and math workers	7,383	7,678	6,623
Computer and math share of STEM workers	46.1%	49.2%	47.1%
Highly educated immigrant workers	5,034	5,785	5,593
Immigrant share of highly educated workers	9.2%	12.6%	13.5%

## Innovative Ideas



	VA-5	Median U.S. District	Economically Similar Districts
Patent filers	1,656	2,103	1,908
Patents filed	557	797	749
Public R&D funding	\$423M	\$93M	\$330M

## Digital Infrastructure



	VA-5	Median U.S. District	Geographically Similar Districts
Broadband coverage (25 Mbps or more)	59.6%	94.6%	65.1%
Broadband coverage (10 Mbps or more)	92.4%	99.9%	96.4%
Average number of providers per household	5.6	6.7	5.6

## District Highlights

VA-5 is home to a significant amount of R&D, which creates substantial spillover benefits for companies large and small in advanced industries. The University of Virginia conducts \$386 million of R&D annually and is especially strong in medical-sciences research. The school's graduate engineering program is ranked 39th by *US News & World Report*. This puts VA-5 in the top 25 percent of all districts nationally for R&D in higher-education settings. Additionally, the National Radio Astronomy Observatory Central Development Laboratory, funded by the National Science Foundation, conducts research in VA-5, employing scientists who are working to develop electronic components to study the cosmos. This innovative environment helps small companies thrive. Since 2013, the Small Business Innovation Research program has awarded 113 grants, worth a total of \$57.3 million, to local firms to engage in R&D with the potential for commercialization, supporting roughly 1,800 technology-intensive jobs.