

Successful inventors invested twice as much from personal sources prior to application to ERIP than after receipt of the ERIP award. This is consistent with anecdotal evidence that personal sources of funding are consumed early in the development cycle, as well as the fact that successful ERIP inventors will have invested, on average, nearly a quarter of a million dollars from personal sources before they receive their ERIP grant.

Commercial funding (e.g., venture capital and money from other outside investors) and corporate funding (reinvestment of revenues generated by the ERIP technology and subsidies from other business operations) are, after personal funding, the two most common sources of post-award funding for inventions with sales. An average of \$146,000 of commercial funding has been obtained by 22% of the successful ERIP technologies since reception of the ERIP grant. Corporate funding was acquired, after reception of ERIP grants, by 24% of the ERIP technologies with sales, averaging \$116,000.

Follow-on funding from other public programs is relatively unimportant for those inventors who have successfully reached the market, but has been a valuable source of support for those not yet in the market. Seven percent of ERIP inventors who enter the market obtain other federal funding subsequent to the ERIP award; this amounts to less than 4% of overall funding after receipt of the ERIP grant. State and local funding after the ERIP grant is even less significant for inventors with sales; only four percent have received this type of funding, and it represents less than 1% of funding during this period.

For ERIP inventors without sales, however, the picture is quite different. About a tenth of ERIP inventors without sales have acquired additional funding from other federal agencies; this accounts for 22% of the funding acquired after reception of the ERIP grant. Ten percent of ERIP inventors without sales also acquired state or local funding, amounting to 6% of post-grant funding.

Other sources of funding play a less important role for ERIP inventions. Throughout the innovation development process, lending institutions are much less important sources of funds than are personal sources, internal corporate sources, or outside investors. After receipt of the ERIP grant, loans from commercial banking institutions have been utilized by 7% of the inventions with sales and only 1% of those without sales. These loans represent 3% of the total post-grant funding for inventors with sales, and less than 1% of funding for inventors without sales.

In aggregate, the 251 inventions for which financing data are available raised a total of \$32M before application to ERIP, \$32M during the grant approval process, and \$68M after receipt of the ERIP grant. These figures are undoubtedly low estimates for the program as a whole because of the small sample size on which they are based, and the presence of a significant number of young technologies in the current sample. Technologies that have been sampled in previous years but which were not captured by the current sample design have accumulated an additional \$120M before