National highlights show emergence of corporates and some non-traditional investors

- Mega rounds (+$100M) continued and VC investment remained relatively steady at $136.5 billion in 2019 compared to $140.2 billion invested in 2018.

- VCs exited over $250 billion, nearly 80% of which came from VC-backed IPOs.

- The number of US financing rounds increased 2.2% from 10,542 in 2018 to 10,777 in 2019.

- Nontraditional VC investors such as sovereign wealth funds and PE funds are driving larger deal sizes and higher valuations.
Pittsburgh draws $3B in investment in 2019

- Investment increased more than 5X from $550 million in 2018 to almost $3.0 billion driven by $2.0 billion of corporate investment and $928 million of venture capital investment.
- The number of local investment deals increased 51% from 2010 to 2019 and 139 unique Pittsburgh area startups attracted funding this year.
- In dollar terms, autonomous vehicles dominated funding, but by number of companies, funding was diversified across software, life sciences, hardware/robotics, materials and industrial technologies.
In 2019, 139 Pittsburgh companies attracted close to $3B in investment dollars. Investment dollars grew 627% from 2010 to 2019.

Source: CB Insights, Dow Jones VentureSource, Innovation Works, PitchBook
Strong trends in number of deals and companies funded

The number of unique companies funded increased 48% from 2010 to 2019

Source: CB Insights, Dow Jones VentureSource, Innovation Works, PitchBook
Growth in investors, exits, research boost Pittsburgh

► Local companies generated over $10.7 billion in disclosed exit values from 2010 to 2019.

► Pittsburgh companies attracted investment from over 270 firms from around the world in the past 5 years.
  ► 39 firms made first investment in Pittsburgh in 2019

► Pittsburgh stacks up favorably per capita to other regions in the US, outpacing other emerging tech hubs in terms of deals and/or dollars.

► Our pipeline is strong. Local research universities have deployed more than $10 billion in research funding in the past decade.
Pittsburgh has a diverse array of industries attracting capital

### Unique Pittsburgh companies receiving funding by tech sector

<table>
<thead>
<tr>
<th>Year</th>
<th>Software</th>
<th>Life Sciences</th>
<th>Hardware &amp; Robotics</th>
<th>Energy &amp; Industrial</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>40%</td>
<td>25%</td>
<td>32%</td>
<td>14%</td>
<td>9%</td>
</tr>
<tr>
<td>2011</td>
<td>49%</td>
<td>25%</td>
<td>32%</td>
<td>19%</td>
<td>15%</td>
</tr>
<tr>
<td>2012</td>
<td>32%</td>
<td>32%</td>
<td>26%</td>
<td>10%</td>
<td>19%</td>
</tr>
<tr>
<td>2013</td>
<td>38%</td>
<td>38%</td>
<td>26%</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td>2014</td>
<td>38%</td>
<td>38%</td>
<td>26%</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td>2015</td>
<td>36%</td>
<td>36%</td>
<td>21%</td>
<td>15%</td>
<td>13%</td>
</tr>
<tr>
<td>2016</td>
<td>31%</td>
<td>31%</td>
<td>23%</td>
<td>13%</td>
<td>22%</td>
</tr>
<tr>
<td>2017</td>
<td>35%</td>
<td>35%</td>
<td>28%</td>
<td>11%</td>
<td>22%</td>
</tr>
<tr>
<td>2018</td>
<td>37%</td>
<td>37%</td>
<td>24%</td>
<td>9%</td>
<td>22%</td>
</tr>
<tr>
<td>2019</td>
<td>37%</td>
<td>37%</td>
<td>27%</td>
<td>9%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Source: CB Insights, Dow Jones VentureSource, Innovation Works, PitchBook
103 exits valued at $10.7 billion from 2010 to 2019 and 8 exits in 2019

### Representative Deals

<table>
<thead>
<tr>
<th>Deal Description</th>
<th>Acquirer</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>GiftCards.com</td>
<td>Blackhawk Network</td>
<td>2016</td>
</tr>
<tr>
<td>Net Health</td>
<td>The Carlyle Group</td>
<td>2017</td>
</tr>
<tr>
<td>M*Modal</td>
<td>3M</td>
<td>2018</td>
</tr>
<tr>
<td>Cancer Treatment Services</td>
<td>Varian Medical Systems</td>
<td>2019</td>
</tr>
<tr>
<td>Creehan &amp; Company</td>
<td>Inovalon</td>
<td>2016</td>
</tr>
<tr>
<td>Krystal Biotech</td>
<td>IPO</td>
<td>2017</td>
</tr>
<tr>
<td>Avere Systems</td>
<td>Microsoft</td>
<td>2018</td>
</tr>
<tr>
<td>VoIP Innovations</td>
<td>Sangoma Technologies</td>
<td>2019</td>
</tr>
<tr>
<td>Think Through Learning</td>
<td>Imagine Learning</td>
<td>2016</td>
</tr>
<tr>
<td>NoWait</td>
<td>Yelp</td>
<td>2017</td>
</tr>
<tr>
<td>TandemLife</td>
<td>LivaNova</td>
<td>2018</td>
</tr>
<tr>
<td>StelKast</td>
<td>Globus Medical</td>
<td>2019</td>
</tr>
<tr>
<td>Thar Pharmaceuticals</td>
<td>Grunenthal</td>
<td>2016</td>
</tr>
<tr>
<td>ModCloth</td>
<td>Jet.com</td>
<td>2017</td>
</tr>
<tr>
<td>Wombat Security Technologies</td>
<td>Proofpoint</td>
<td>2018</td>
</tr>
<tr>
<td>The Efficiency Network</td>
<td>Duquesne Light</td>
<td>2019</td>
</tr>
</tbody>
</table>
Over 180 unique venture capital firms, angel groups and strategic investors have made investments in Pittsburgh companies in the past five years. The chart below contains a sampling of these firms including 31 firms – listed in bold font – that made their first investments in the region in 2018.

**Pittsburgh region**
- Active X-It
- Adams Capital Management
- AGSM
- Birchmere Ventures
- BlueTree Capital Group
- Draper Triangle Ventures
- Eagle Ventures
- Idea Foundry
- Networks
- Innovation Works
- Mountain State Capital
- Newlin Investment Company
- Next Act Fund

**California and Western region**
- 3Lines Venture Capital
- Altos Ventures
- Amazon Alexa Fund
- ARCH Venture Partners
- Aspect Ventures
- AV8 Ventures
- Blackhorn Ventures
- Bling Capital
- Breakout Labs
- BreakTheVentures
- CapitalG
- Cola Capital
- CureDuchenne Ventures
- Foundation Capital
- Founders Fund
- Geodesic Capital

**Midwest region**
- Allos Ventures
- Arboretum Ventures
- Ascension Ventures
- Boeing HorizontX
- Centennial Ventures
- Chrysalis Ventures
- CoreNetwork Fund
- Drive Capital

**Dundee Venture Capital**
- Elevate Ventures
- Firebrand Ventures
- KB Partners
- Liberty Global Ventures
- M25 Group
- New Stack Ventures

**Origin Ventures**
- Radical Ventures
- Salix Ventures

**New England region**
- Bain Capital Ventures
- GE Ventures
- Harborsight Capital
- Hyperplane Venture Capital
- L Catterton
- LearnLaunch Accelerator

**New York region**
- Allen & Co.
- Carbon Ventures
- DFW
- Eastern Advisors Capital Group
- ff Venture Capital
- Golden Seeds
- Great Oaks Venture Capital
- Grid Capital Management
- Hearst Ventures
- Insight Venture Partners
- KKR

**Philadelphia region**
- Activate Venture Partners
- Commerce Health Ventures
- DreamIt Health
- Leading Edge Ventures
- Mt-12 Ventures
- Novitas Capital
- SeventySix Capital

**International**
- Aduvo Investment (Poland)
- Advantech Capital (China)
- Balderton Capital (UK)
- DENSO (Japan)
- Edmond de Rothschild Investment Partners (France)
- Forward Partners (UK)
- Greensoil Investments (Canada)
- H&M CO:LAB (Sweden)
- HBB Healthcare Investments (Switzerland)
- HBM Partners (Switzerland)
- Hydra Ventures (Netherlands)
- Hyundai (South Korea)
- ITIC (Taiwan)
- JAFCCO (Japan)
- next47 (Germany)
- Northern Light Venture Capital (China)

**Baltimore/Washington, DC region**
- ABS Capital
- Azafar Capital
- Bögló Capital
- Grotech Ventures
- Harbert Growth Partners
- Lavrock Ventures
- New Enterprise Associates

**Sony Innovation Fund**
- Space Angels
- TechStars
- Trifin Capital Partners
- Two Sigma Ventures
- Vital Venture Capital

**California and Western region**
- Greylock Partners
- Homebrew
- Illumina Ventures
- Indie.vc
- Intel Capital
- Keiretsu Forum
- Kleiner Perkins Caufield & Byers
- Lightspeed Venture Partners
- Lucas Venture Group
- Menlo Ventures
- Motus Ventures
- NewGen Capital
- Norwest Venture Partners
- Oriza Ventures
- Partech Ventures
- Paxion Capital Partners

**Plexo Capital**
- Right Side Capital Management
- Riverwood Capital Group
- Salesforce Ventures
- Sequoia Capital
- Silverton Partners
- Space Angels Network
- Stout Street Capital
- Tech Coast Angels
- Tridel Capital
- Trucks VC
- Tsingyuan Ventures
- Uber
- Western Digital Capital
- Westly Group
- WV
- Y Combinator

**Philips (Netherlands)**
- Renewal Partners (Canada)
- Runa Capital (Russia)

**Softbank Group (Japan)**
- Tencent (China)
- Toyota (Japan)
- TVM Capital (Germany)
- Volkswagen Group (Germany)
Pittsburgh ranked 15th in deals per million residents in 2019 among the 40 largest Metropolitan Statistical Areas

<table>
<thead>
<tr>
<th>Metropolitan Statistical Area</th>
<th>Deals per Million Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco-Oakland-Fremont, CA</td>
<td>437</td>
</tr>
<tr>
<td>San Jose-Sunnyvale-Santa Clara, CA</td>
<td>323</td>
</tr>
<tr>
<td>Boston-Cambridge-Quincy, MA-NH</td>
<td>155</td>
</tr>
<tr>
<td>Chicago-Naperville-Joliet, IL-IN-WI</td>
<td>145</td>
</tr>
<tr>
<td>Austin-Round Rock, TX</td>
<td>133</td>
</tr>
<tr>
<td>Seattle-Tacoma-Bellevue, WA</td>
<td>106</td>
</tr>
<tr>
<td>San Diego-Carlsbad-San Marcos, CA</td>
<td>88</td>
</tr>
<tr>
<td>New York-Northern New Jersey-Long Island, NY-NJ-PA</td>
<td>71</td>
</tr>
<tr>
<td>Los Angeles-Long Beach-Santa Ana, CA</td>
<td>58</td>
</tr>
<tr>
<td>Boulder, CO</td>
<td>55</td>
</tr>
<tr>
<td>Portland-Vancouver-Beaverton, OR-WA</td>
<td>48</td>
</tr>
<tr>
<td>Indianapolis-Carmel, IN</td>
<td>43</td>
</tr>
<tr>
<td>Washington-Arlington-Alexandria, DC-VA-MD-WV</td>
<td>43</td>
</tr>
<tr>
<td>Philadelphia-Camden-Wilmington, PA-NJ-DE-MD</td>
<td>39</td>
</tr>
<tr>
<td>Pittsburgh, PA</td>
<td>38</td>
</tr>
<tr>
<td>Dallas-Fort Worth-Arlington, TX</td>
<td>37</td>
</tr>
<tr>
<td>Nashville-Davidson-Murfreesboro-Franklin, TN</td>
<td>36</td>
</tr>
<tr>
<td>Las Vegas-Henderson-Paradise, NV</td>
<td>34</td>
</tr>
<tr>
<td>Minneapolis-St. Paul-Bloomington, MN-WI</td>
<td>33</td>
</tr>
<tr>
<td>Atlanta-Sandy Springs-Marietta, GA</td>
<td>27</td>
</tr>
<tr>
<td>Milwaukee-Waukesha-West Allis, WI</td>
<td>26</td>
</tr>
<tr>
<td>Baltimore-Towson, MD</td>
<td>25</td>
</tr>
<tr>
<td>San Antonio-New Braunfels, TX</td>
<td>23</td>
</tr>
<tr>
<td>Miami-Fort Lauderdale-Pompano Beach, FL</td>
<td>21</td>
</tr>
<tr>
<td>Phoenix-Mesa-Scottsdale, AZ</td>
<td>21</td>
</tr>
<tr>
<td>Cleveland-Elyria-Mentor, OH</td>
<td>4</td>
</tr>
<tr>
<td>Riverside-San Bernardino-Ontario, CA</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Pitchbook and US Census
Pittsburgh ranked 21st in investment dollars per capita in 2019 among the 40 largest Metropolitan Statistical Areas

Note: The data presented above is based on raw data from the Pitchbook database. Pitchbook omits several of the most significant financing events in the past several years, including major financing rounds raised by Argo AI, Uber ATG and Aurora.

Source: Pitchbook and US Census
Patent generation and licensing at Pittsburgh’s world-class research universities continue to increase.

Source: Carnegie Mellon University, Duquesne University and the University of Pittsburgh.
2019 Pittsburgh investment highlights

Argo.ai
Ford, Volkswagen

Duolingo
NewView Capital, Drive Capital, Inside Capital, Capital G, Kleiner Perkins, A-Grade Investments and Union Square Ventures

Aurora
Amazon, Geodesic Capital, Hyundai, Lightspeed Venture Partners, Sequoia Capital, Shell Ventures, T. Rowe Price, Greylock Partners and Index Ventures

Gecko Robotics
Drive Capital, Founders Fund, Y Combinator, Next47 and Mark Cuban

fifth season
Drive Capital

Astrobotic
Space Angels Network, Innovation Works