

F/PRIME



State of Robotics

2021-2025



The robotics industry is hitting an inflection point

Companies are scaling rapidly

33%

Market cap growth of US public robotics companies

24%

Median revenue growth of public robotics companies

87%

Enterprise value growth of private robotics unicorns

Exits are ramping up

6

\$250M+ acquisitions in 2024 & 2025

9

New public robotics companies worth \$500M+ in 2024 & 2025

Massive market tailwinds fueling investment growth

\$20B

Investment into robotics this year, reaching an all-time high

3x

Growth in General Purpose Robotics, fueled by AI disruption

2x

Growth in Defense robotics, fueled by government demand

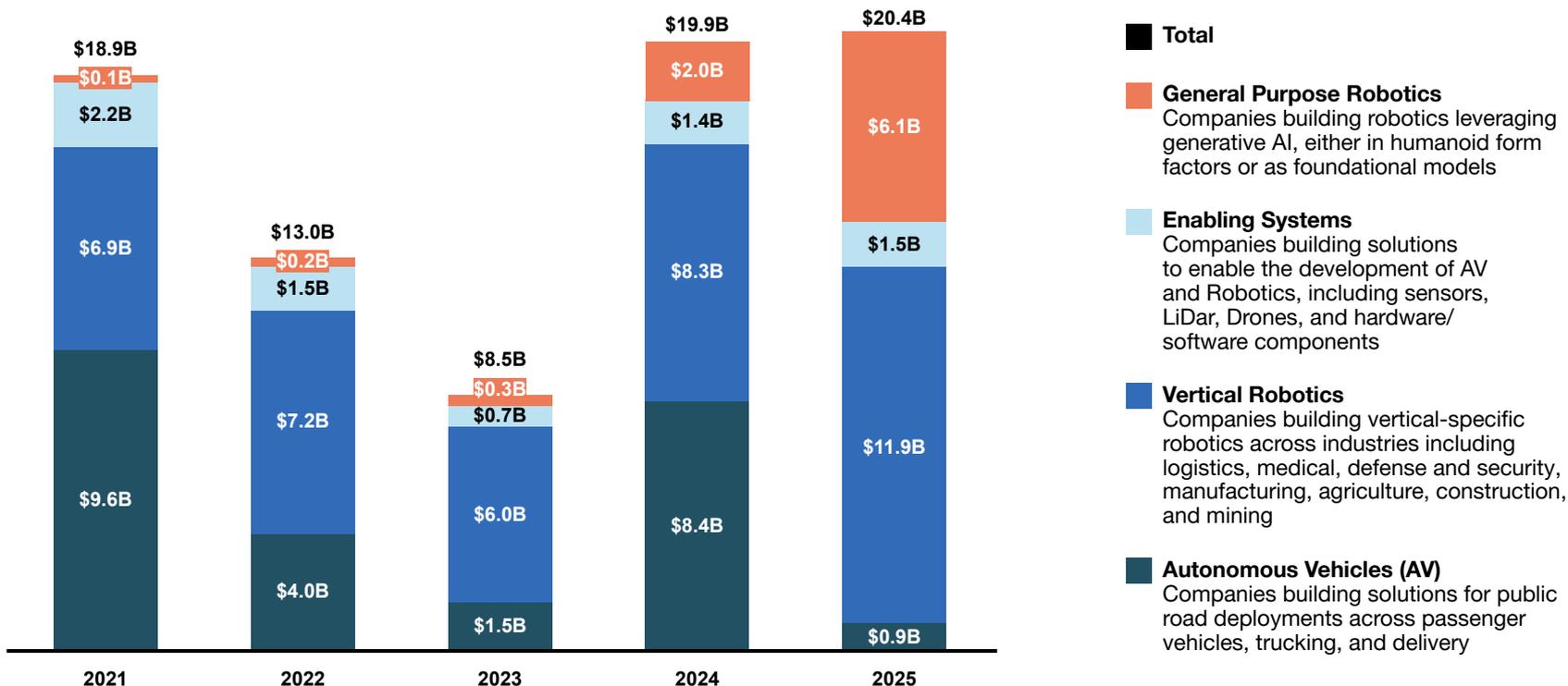
Investment in Robotics in 2025 has reached all-time highs

Robotics Investment By Geography, \$B



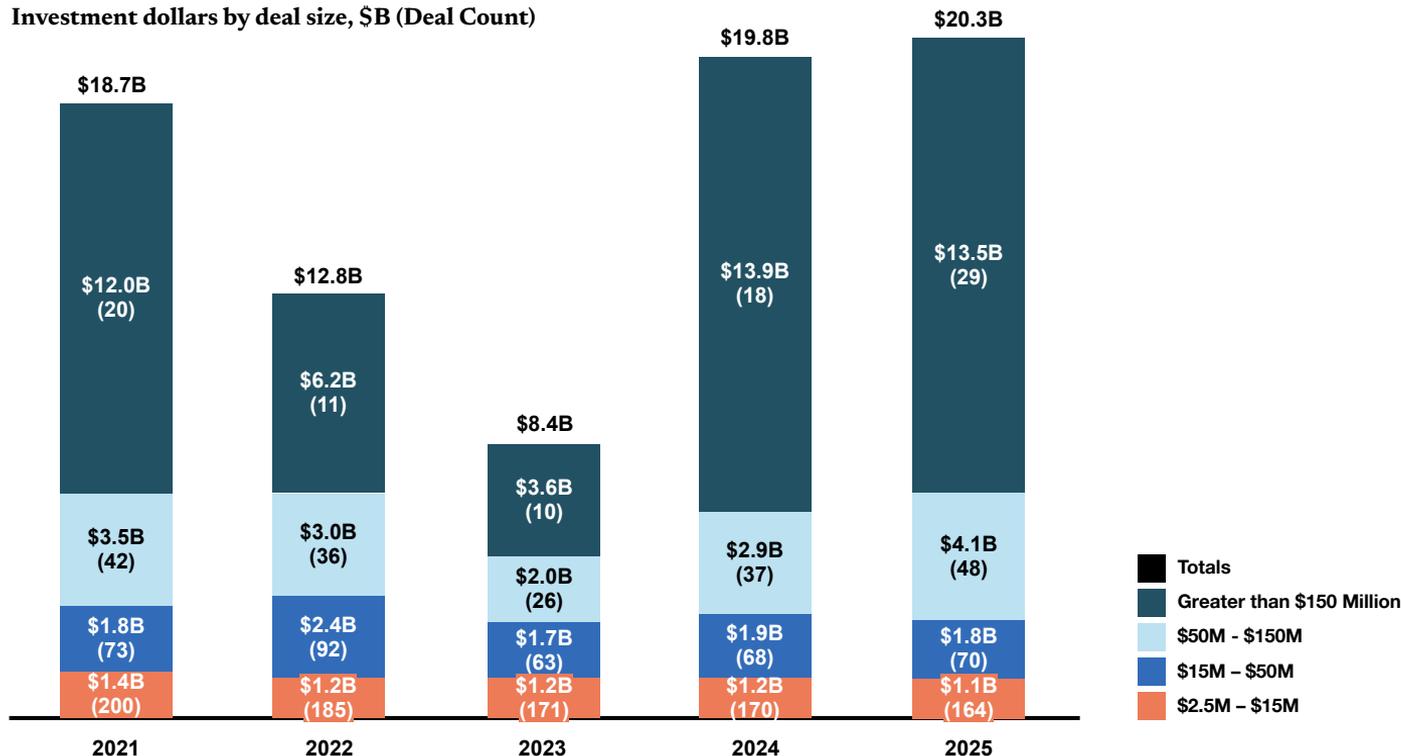
Investment pace in 2025 is driven by Vertical and General Purpose Robotics

Annual venture funding for US, European and Israeli robotics companies



All of the funding gains of the last 2 years have been for mega rounds of \$50M+; early and mid-stage rounds are flat for the last 5 years

Investment dollars by deal size, \$B (Deal Count)

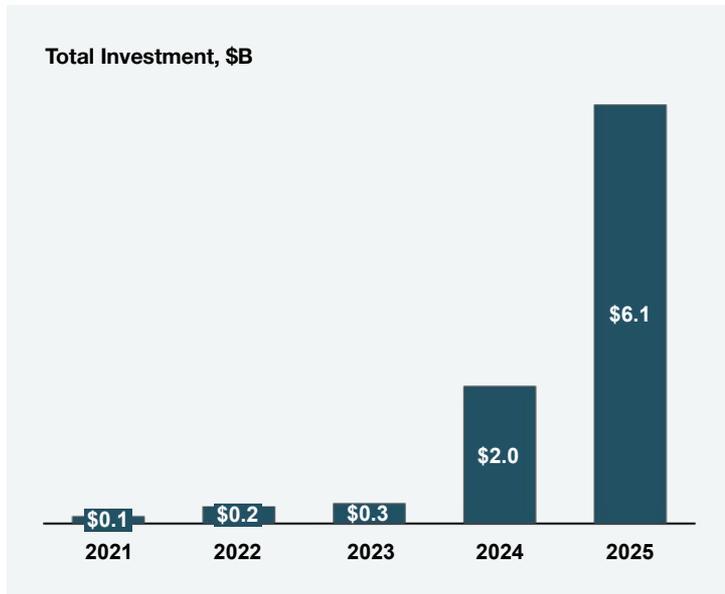


Note: analysis excludes rounds <\$2.5M, and hence numbers do not match to previous pages

Source: Pitchbook, F-Prime team analysis

Investments in Humanoids and Foundation Models have been the fastest growing sector of robotics, with a handful of companies raising significant capital in 2025

Humanoids & Robotic Foundation Models - Americas, Europe, and Israel



Funding Rounds above \$100M, 2025

Company	Segment	Round Size	Company	Segment	Round Size
FIGURE	Humanoid	\$1.5B	Physical Intelligence (x)	RFM	\$600M
IX	Humanoid	\$1.0B	SKILD AI	RFM	\$500M
APPTRONIK	Humanoid	\$734M	FieldAI	RFM	\$315M
Agility Robotics	Humanoid	\$400M	RHODA AI	RFM	\$163M
NEURA ROBOTICS	Humanoid	\$124M	DYNΛ	RFM	\$144M
FOUNDATION	Humanoid	\$100M	Generalist	RFM	\$128M
			Genesis AI	RFM	\$105M

Humanoid companies are actively piloting and planning for scale-up

BostonDynamics



Atlas entering production; 2026 deployments committed to Hyundai and DeepMind.



Figure 02 BMW pilot: 1,250 hrs, 90K+ parts loaded, 30K vehicles produced.



Converting Fremont lines to Optimus production. Gen 3 unveiled; targeting 1M units/yr.



Digit moved 100K+ totes at GXO warehouse. First humanoid at high-volume industrial throughput.



Partnered with Jabil to manufacture Apollo at scale; DeepMind deploying AI integration.

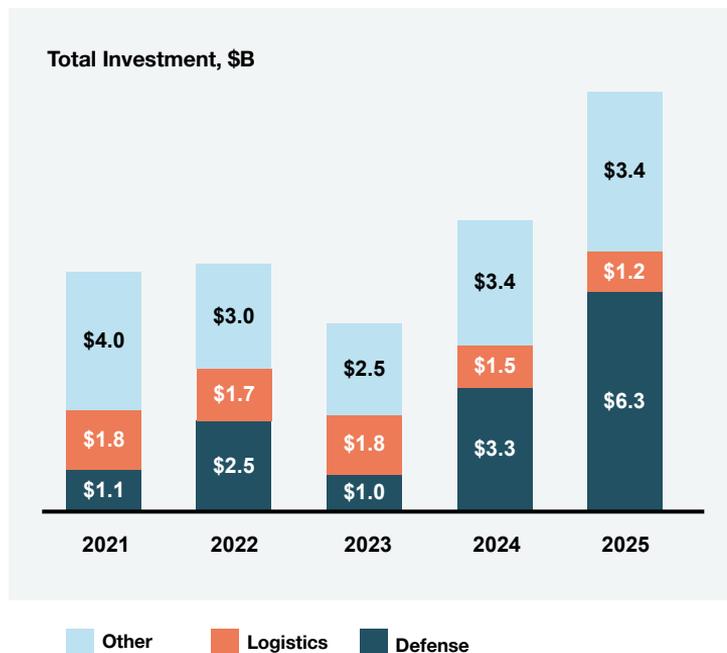


Home-focused humanoids deployed to factories, bridging residential and industrial via partner EQT.



Vertical robotics is increasingly driven by Defense, with 6x growth over the last 2 years

Vertical Robotics - Americas, Europe, Israel



Funding Rounds above \$100M, 2025

Company	Segment	Round Size
ANDURIL	Defense	\$2.5B
Helsing	Defense	\$683M
SARONIC	Defense	\$600M
TEKEVER	Defense	\$500M
QUANTUM SYSTEMS	Defense	\$390M <small>over 2 rounds</small>
AVRIDE	Logistics	\$375M
HADRIAN	Manufacturing	\$260M
EPIRUS	Defense	\$250M

Company	Segment	Round Size
Shield AI	Defense	\$240M
Noah Medical	Medical	\$230M
CMR SURGICAL	Medical	\$200M
DEXORY	Logistics	\$165M
AWbotics	Other	\$161M
SOLEE	Consumer	\$150M
Distalmotion	Medical	\$150M
zipline	Logistics	\$150M

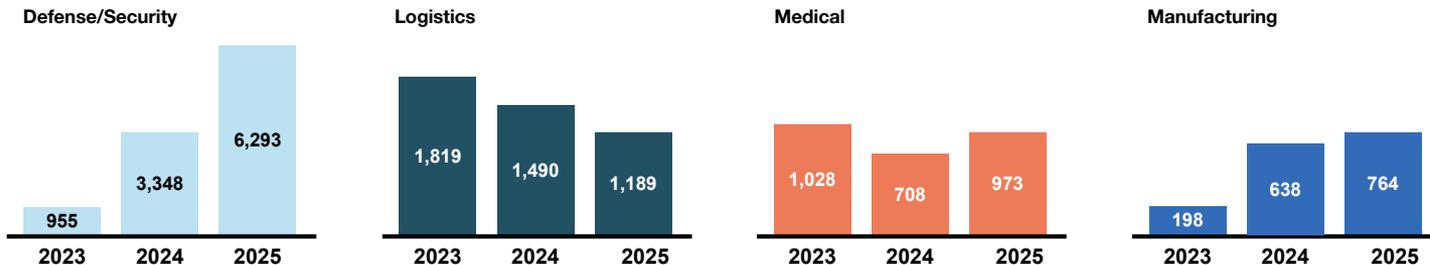
Other: Other includes medical, manufacturing, consumer, agriculture, food, lab/pharma, construction & mining, inspection/survey, landscaping, recycling, retail, cleaning/maintenance and marine use cases, amongst others

Source: PitchBook, F-Prime team analysis

In addition to established verticals, agriculture has started to attract more investment

Established segments

>\$500M invested/yr

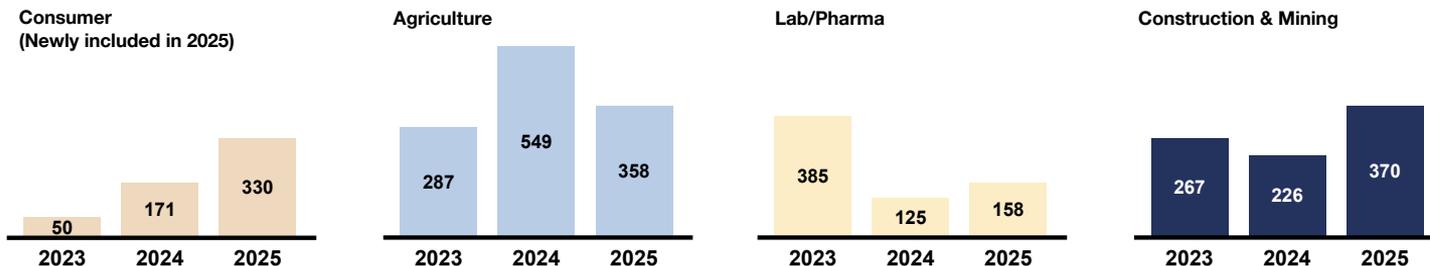


Highest funded private companies, 2021-2025



Emerging segments

<\$500M invested/yr

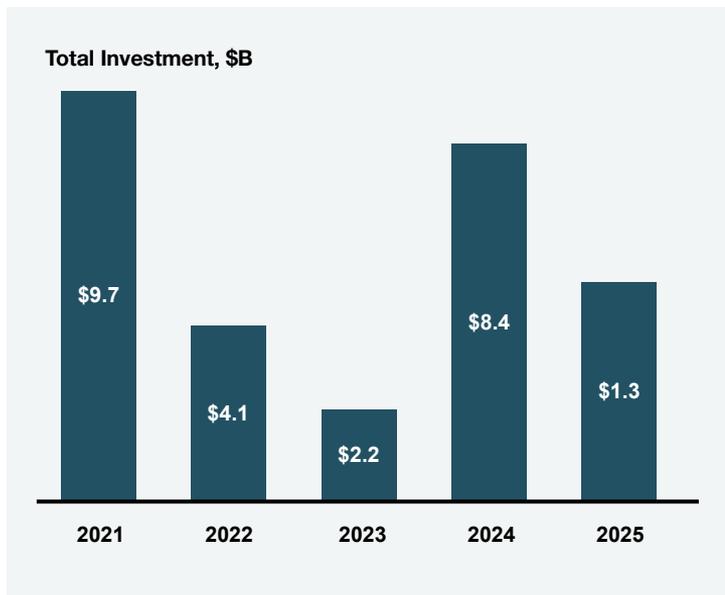


Highest funded private companies, 2021-2025



The AV market is concentrated amongst a few players that have raised significant capital

Autonomous Vehicles - Americas, Europe, Israel



Top Total Funding 2021 – 2025

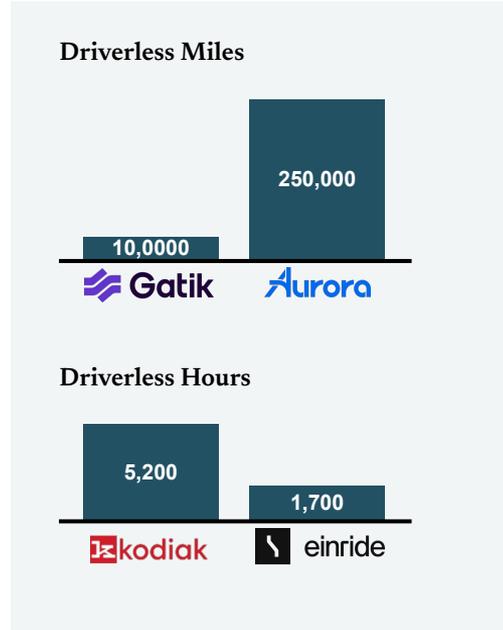
Company	Segment	Round Size
 WAYMO	Passenger	\$8.1B
 CRUISE	Passenger	\$7.3B
 NURO	Passenger	\$1.9B
 WAYVE	Passenger	\$1.3B
 STACK	Trucking	\$1.0B
 Motional	Passenger	\$901M
 einride	Trucking	\$739M

Company	Segment	Round Size
 pony.ai	Passenger	\$467M
 PlusAI	Trucking	\$387M
 MAYmobility	Passenger	\$338M
 verne	Passenger	\$305M
 waabi	Trucking	\$283M
 Gatik	Trucking	\$252M
 kodiak	Trucking	\$200M

Despite the significant capital, Waymo is the only AV provider in the West with meaningful deployments

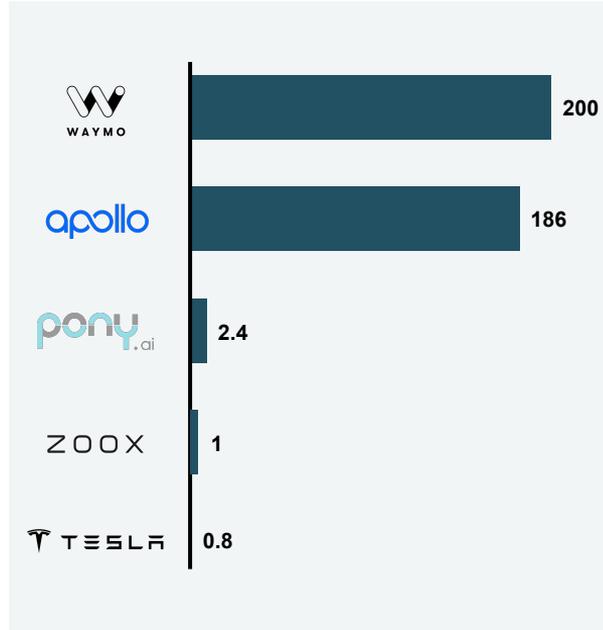
Trucking

Autonomous Traction

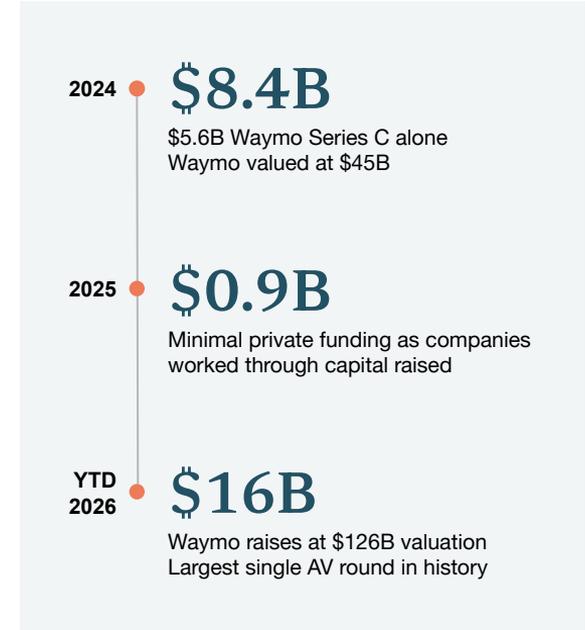


RoboTaxi Driverless Miles

(M Miles)

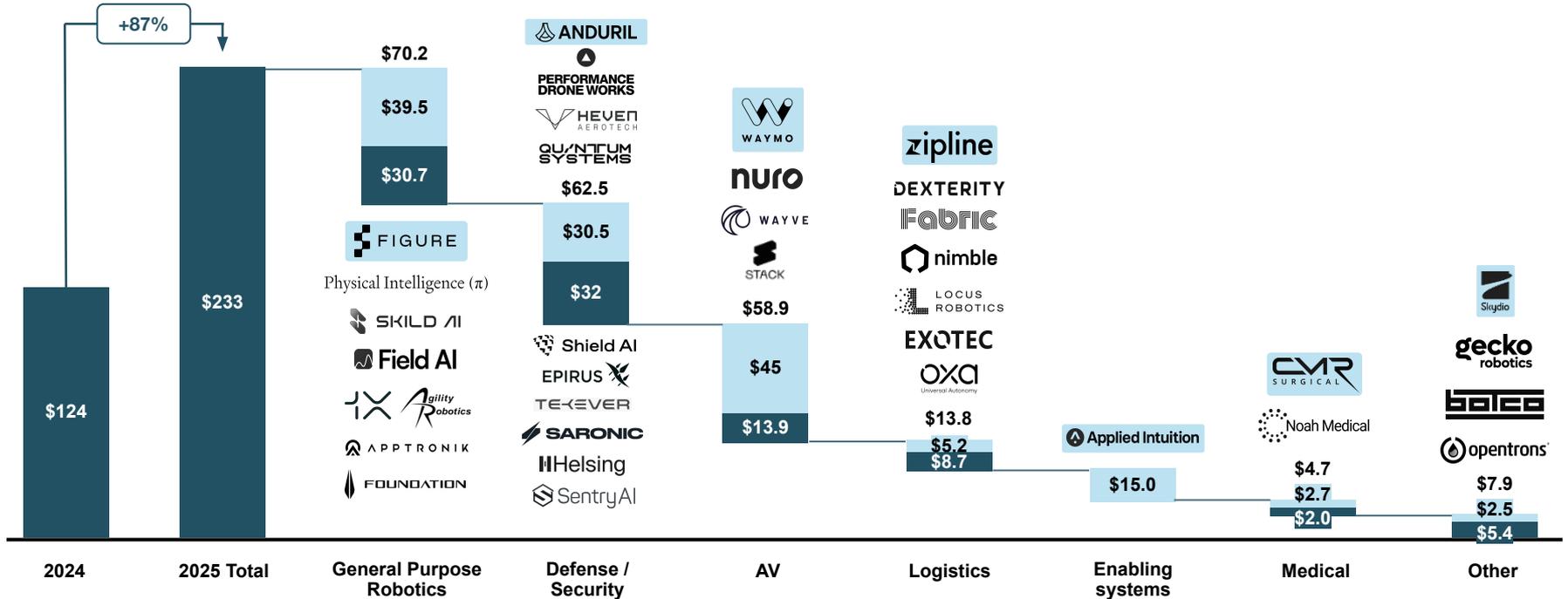


Private AV Funding



Private unicorn value skyrocketed this year, with General Purpose Robotics and Defense becoming the highest valued segments

Private market value of unicorns split by use case, \$B

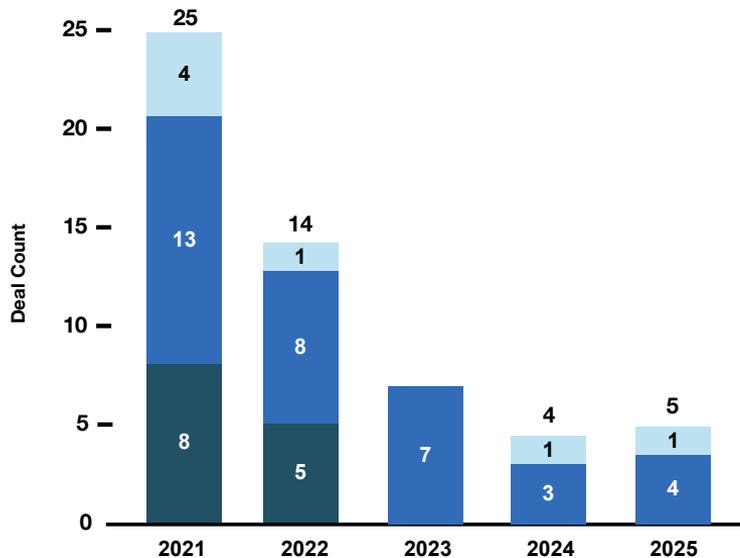


Along with the excitement, there have been several high-profile shutdowns in 2025, several of which were focused on agriculture

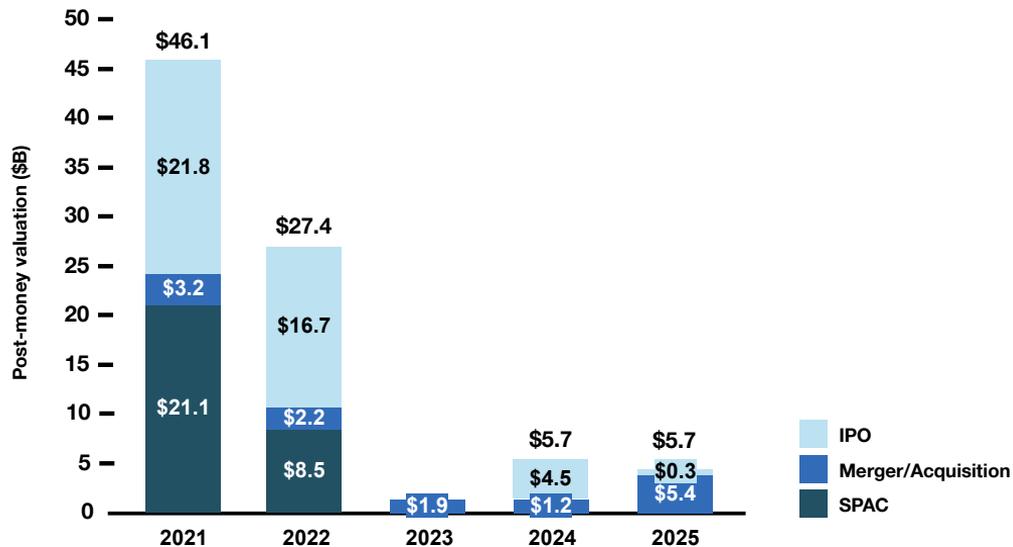
Private Companies		Total Raised	Public/Corporate	
 ample	EV battery swap startup filed for bankruptcy	\$300M+	 cruise	GM discontinued robotaxi development program GM Subsidiary
 MONARCH	Autonomous tractor company shut down operations	\$250M+	 iRobot	Roomba maker collapsed after failed Amazon deal Public
 ATTABOTICS	Warehouse robotics company filed for bankruptcy	\$170M+	LUMINAR	Lidar maker filed for bankruptcy protection Public
 FarmWise	Agricultural robotics firm ceased operations	\$80M+	 fetch robotics	Zebra wound down Fetch-based mobile robot group Zebra
 naio Technologies	Agriculture robotics company entered administration	\$60M+	 AWS RoboMaker	Cloud robotics service shut down after low adoption Amazon
 RAPID ROBOTICS	Assets acquired by Robco after shutdown	\$50M+		
 GUARDIAN AGRICULTURE	Agricultural drone startup shutdown	\$45M+		

The lack of exits the last two years has been an industry headwind

Exit transaction count by year

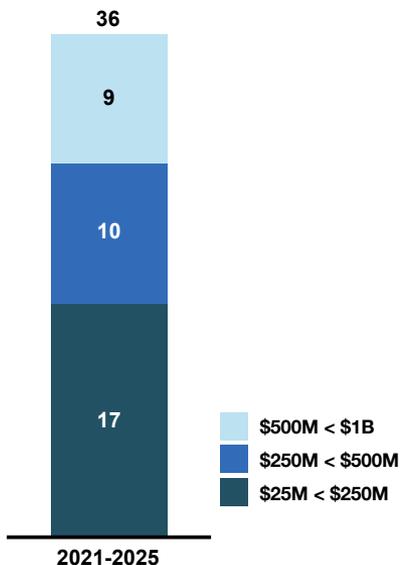


Exit transaction valuation by year, \$B



M&A is slowly recovering with Defense driving many of the recent exits

M&A by size (count)



M&A exits above \$250M, 2024-2025

Venture Backed Exits

Company	Acquisition Value	Date	Acquirer	Segment
BLUETHALO	\$4.1B	May 2025	AeroVironment™	Defense
EDGE AUTONOMY	\$925M	January 2025	REDWIRE	Defense
BEAR ROBOTICS	\$600M*	January 2025	LG Electronics	Food
Dedrone®	\$500M	July 2024	AXON	Defense
GHOST ROBOTICS	\$400M	April 2024	LIG Nex1	Defense
AERODOME	\$300M	October 2024	flock safety	Security

Other Notable Exits (Excluded from totals)



*51% acquisition

Note: Only includes Americas, Europe, and Israel, and M&A exits >\$250M, excl. Motional

Source: Pitchbook, F-Prime team analysis

Public market Robotics companies have seen strong stock performance in the last 12 months

COMPANY	MARKET CAP 12/31/2025	LTM REVENUE ²	REVENUE GROWTH ²	EV / LTM REVENUE	LTM EBITDA MARGIN ²	12 MONTH STOCK PERFORMANCE	SEGMENT	IPO DATE
 INTUITIVE	\$201B	\$9.6B	22%	20.3x	35%	1.1x	Medical	June-00
 symbotic	\$33.0B	\$2.2B	25%	14.0x	-2%	2.5x	Logistics	June-22
 AV AeroVironment™	\$12.0B	\$890M	17%	13.8x	9%	1.6x	Defense	January-07
 Aurora	\$7.4B	\$2.0M	NA	3120x	NA	0.6x	Trucking	November-21
 AutoStore	\$3.9B	\$524M	-15%	7.9x	32%	1.2x	Logistics	October-21
 kodiak	\$1.9B	\$16M	1020%	123x	NA	1.4x ¹	Trucking	September-25
 PROCEPT [®] BioRobotics	\$1.8B	\$300M	50%	5.2x	-29%	0.4x	Medical	September-21
 OUSTER [®]	\$1.3B	\$137M	31%	8.1x	-72%	1.8x	LiDar	March-21
 RED CAT	\$947M	\$16M	-1%	46.5x	NA	0.6x	Defense	April-21
 AEVA	\$798M	\$15M	90%	51.2x	NA	2.8x	LiDar	March-21
 serve	\$773M	\$1.9M	14%	291x	NA	0.8x	Delivery	April-24
Median: 24%				Median: 20.3x		Average: 1.3x		

China's public market Robotics companies have seen even stronger market performance

COMPANY	MARKET CAP 12/31/2025	LTM REVENUE ²	REVENUE GROWTH ²	EV / LTM REVENUE	LTM EBITDA MARGIN ²	12 MONTH STOCK PERFORMANCE	SEGMENT	IPO DATE
 Horizon Robotics	\$16.3B	\$400M	41%	38.9x	-81%	2.4x	AV	October-24
 UBTECH	\$8.2B	\$210M	12%	39.2x	-67%	2.3x	Humanoid	December-23
 ECOVACS ROBOTICS	\$6.7B	\$2.8B	19%	2.2x	10%	1.8x	Cleaning	May-18
 pony.ci	\$6.3B	\$96M	7%	60.9x	NA	1.0x	AV	November-24
 roborock	\$5.6B	\$2.5B	74%	1.8x	8%	1.0x	Cleaning	December-19
 Geek+	\$3.8B	\$387M	22%	9.7x	-2%	1.2x ¹	Logistics	July-25
 HESAI	\$3.5B	\$400M	43%	6.5x	12%	1.6x	LiDar	June-23
 WeRide	\$3.0B	\$73M	73%	31.0x	NA	0.6x	AV	October-24
 robosense	\$2.2B	\$249M	3%	7.4x	-20%	1.2x	LiDar	January-24
 Soul Robotics	\$1.7B	\$160M	32%	10.6x	-49%	0.8x ¹	LiDar	December-25
 YUNJI TECHNOLOGY	\$1.0B	\$34M	69%	29.3x	-23%	0.9x ¹	Hospitality	October-25
Median: 32%				Median: 10.6x		Average: 1.5x		

¹ Performance vs IPO date

² TTM from Q3 2025 to consider information available at the time of valuation; Seyond and Yunji data through 2024 only

Where is the Robotics market headed?

Technology disruption

The next wave of AI-led technology disruption is fueling investment into transformational, general purpose robotics opportunities

Rise of the mega-rounds

Investor appetite for massive rounds fueled by proof points of commercial scale, often coupled with success in the public markets

Defense takes off

Modern defense strategies are being transformed by investment into autonomous systems

Success is uneven

Despite the success stories, there continue to be high-profile shutdowns that serve as a reality check for investment excitement in robotics



State of Robotics team



Sanjay Aggarwal
Venture Partner



Betsy Mulé
Principal



Learn more about F-Prime



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About F-Prime

We create and invest in healthcare and technology companies that impact lives all over the world. We have over 370 companies in our portfolio including 23 that we started. Our global portfolio is spread across the US, Europe, and Asia.



F-Prime Tech partnership



David Jegen
Managing Partner



Gaurav Tuli
Partner



Rocio Wu
Partner



Sanjay Aggarwal
Venture Partner



Shervin Ghaemmaghami
Operating Partner



Abdul Abdirahman
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Henry Trapnell
Industry Networks Director



Kendra Ryan
Ecosystem Network Director



Tenzin Jampa
Data Scientist

F-Prime Tech partnership



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Managing Partner



Gaurav Tuli
Partner



Rocio Wu
Partner



Sanjay Aggarwal
Venture Partner



Shervin Ghaemmaghami
Operating Partner



Abdul Abdirahman
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